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How to Analyze the Potential of Digital Games for Human Rights Education

Como analisar o potencial dos jogos digitais para a educação em direitos humanos

Comment analyser le potentiel des jeux numériques pour l'éducation aux droits de l'homme

Cómo analizar el potencial de los juegos digitales para la educación en derechos humanos

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ABSTRACT:

Serious games that address topics related to human rights education have become increasingly available since the launch of Escape from Woomera in 2003, a game that raises awareness of the plight of refugees. A majority of serious games in the field of human rights focus on topics related to refugees and poverty in order to raise awareness and evoke empathy for the groups depicted. The paper introduces the Serious Games Design Assessment (SGDA) Framework as a tool to find out if a certain game might be used to achieve the objective the designer intended when designing the game. Using the game Bury Me, My Love, which shows the journey of a Syrian woman wanting to escape to Europe, the approach is explained in detail. The conclusion of the game-analysis shows that Bury Me, My Love can be regarded as a successful example of a serious game that introduces and engages the player in what it means to leave your home country as all game-design elements support the purpose.

KEYWORDS: human rights, games for change, serious games, game-design, teaching.

RESUMO:

Os jogos sérios que abordam tópicos relacionados com a educação em direitos humanos têm-se tornado cada vez mais disponíveis desde o lançamento do Escape from Woomera em 2003, um jogo que conscientiza a situação dos refugiados. A maioria dos jogos sérios no campo dos direitos humanos concentra-se em tópicos relacionados com refugiados e pobreza, a fim de aumentar a conscientização e evocar empatia pelos grupos representados. O estudo apresenta a Estrutura do Serious Games Design Assessment (SGDA) como uma ferramenta para avaliar se um determinado jogo pode ser usado para atingir o objetivo que o designer pretendia ao criar o jogo. Usando o jogo Bury Me, My Love, que mostra a jornada de uma mulher síria que deseja fugir para a Europa, a abordagem é explicada em detalhes. A conclusão da análise do jogo mostra que Bury Me, My Love pode ser considerado como um exemplo bem sucedido de um jogo sério que introduz e envolve o jogador no que significa deixar o seu país de origem, pois todos os elementos de design do jogo apoiam o objetivo.

PALAVRAS-CHAVE: direitos humanos, jogos para mudança, jogos sérios, design de jogo, ensino.

RÉSUMÉ:

Les jeux sérieux qui traitent de sujets liés à l'éducation aux droits de l'homme sont devenus de plus en plus disponibles depuis le lancement de Escape from Woomera en 2003, un jeu qui sensibilise à la détresse des réfugiés. Une majorité de jeux sérieux dans le domaine des droits de l'homme se concentrent sur des sujets liés aux réfugiés et à la pauvreté afin de sensibiliser et d'évoquer l'empathie pour les groupes représentés. L'article présente le cadre SGDA (Serious Games Design Assessment) comme un outil permettant de déterminer si un jeu donné peut être utilisé pour atteindre l'objectif que le concepteur avait prévu lors de la conception du jeu. En utilisant le jeu Bury Me, My Love, qui montre le voyage d'une Syrienne qui veut fuir en Europe, l'approche est expliquée en détail. La conclusion de l'analyse du jeu montre que Bury Me, My Love peut être considéré comme un exemple réussi de jeu sérieux qui introduit et engage le joueur dans ce qui signifie quitter son pays d'origine puisque tous les éléments de game design supportent le but.

MOTS CLÉS: droits de l'homme, des jeux pour le changement, jeux sérieux, le design du jeu, enseignement.

RESUMEN:

Los juegos serios que abordan temas relacionados con la educación en derechos humanos se han vuelto cada vez más disponibles desde el lanzamiento de Escape from Woomera en 2003, un juego que aumenta la conciencia sobre la difícil situación de los refugiados. La mayoría de los juegos serios en el campo de los derechos humanos se centran en temas relacionados con los refugiados

y la pobreza con el fin de crear conciencia y evocar empatía por los grupos representados. El documento presenta el Marco de evaluación de diseño de juegos serios (SGDA, por sus siglas en inglés) como una herramienta para descubrir si un cierto juego se puede usar para lograr el objetivo que el diseñador pretendía al diseñar el juego. Usando el juego *Bury Me, My Love*, que muestra el viaje de una mujer siria que quiere escapar a Europa, el enfoque se explica en detalle. La conclusión del análisis del juego muestra que *Bury Me, My Love* puede considerarse como un ejemplo exitoso de un juego serio que introduce e involucra al jugador en lo que significa abandonar su país de origen, ya que todos los elementos de diseño del juego respaldan el objetivo.

PALABRAS CLAVE: derechos humanos, juegos para el cambio, juegos serios, Diseño de juego, enseñando.

INTRODUCTION

The right to education is one of the central human rights and it also includes the right to learn about human rights. As stated by the ‘OHCHR | Human Rights Education and Training’ (n.d.), this is especially important as “values, beliefs and attitudes that encourage all individuals to uphold their own rights and that of others” are conveyed by human rights education and thus can help to create a just society as well as prevent human rights violations. The World Programme for Human Rights Education which started in 2005 is currently in its third phase which builds on its first two phases that support the development of knowledge and skills, as well as attitudes and behaviors that support international human rights (United Nations, 2014). The number of serious games dealing with human rights topic has been on the rise for the last years. However, there has not been much research in how far these games might change people’s attitudes and if that’s possible which game-design elements help the games to succeed.

Games for Change is a non-profit organization which promotes games with positive social purposes beyond play (Klopfer, Osterweil, & Salen, 2009). The mission of the organization corresponds with the aims of human rights education, which are often divided into learning about, by and for human rights. Learning about human rights includes knowing about facts and resources like basic documents and organizations, as well as understanding the difference between rights, duties and knowing about (further) development of human rights. Learning by human rights refers to attitudes, values and making judgements like reflecting, recognizing manipulation, developing empathy or criticizing human rights violations. Finally, learning for human rights refers to decision-making and responsibility, empowerment and acting within the context of human rights for social justice.

A BRIEF HISTORY OF DIGITAL HUMAN RIGHT GAMES

Escape from Woomera (2003) is one of the early attempts to focus on human rights in a digital game. The game puts players in the role of an Iranian asylum seeker whose request for asylum has been denied and who therefore decides to plan his escape from Woomera. The game design restricts choices for the players so that they take on the role of the game character – being restricted and frustrated because of the limited choices and possibilities for where to go and what to do. Poremba (2013: 359) points out: “Woomera succeeds less by immersing players in a physical space or revealing truths about the logic of Woomera and detainee strategy, and more in crafting insight into the enacted subjectivity of Woomera refugees, read through the player’s embodied gameplay experience.” Although using game-mechanics of a typical adventure game *Escape from Woomera* was criticised as being too didactic as it imposes the designer’s opinion of what to think about life as a refugee in Australia (Golding, 2013). There are hundreds of digital serious games which focus on topics like poverty, discriminations, refugees, gender issues, or child labor. The majority of these games have been supported or funded by non-governmental organizations (NGOs) and can be categorized according to their aims: (1) to raise awareness about specific problems or human right violations, (2) to criticize certain situations and (3) to motivate action related to these topics on the part of players. Like commercial games, these digital games use a variety of game-design strategies to deal with human rights. Some of the games are

not oriented towards any particularly fun experiences. This might cause players to quit the game without ever turning to it again. Green (2014: 39) writes that “these types of games have earned the pejorative nickname ‘chocolate covered broccoli’ in that they are little more than basic and boring drills dressed up in a thin video game shell.” Fun, therefore, has to be regarded as a key-element of even serious games. However, one has to bear in mind that fun can be seen in different ways (Lazzaro, 2015). Serious fun, for example, refers to purposeful play in which players would like to make a difference in their real world. Making a serious game fun to play can be difficult for designers as “increasing system realism allows you to communicate a deeper message but typically makes for a less accessible, less fun play experience and thus less people will want to play the game” (Swain, 2007, p. 808). Apart from fun, other important factors in games include being very emotional or games using the concept of satire. Video-games can also be regarded as useful tools for fundraising and creating awareness (Stokes, Seggerman, & Rejeski, 2011).

Most games found with topics related to human rights aim to highlight human rights violations by putting the player in the shoes of a character whose rights are violated or by having the player take on the role of a helper. Topics of these serious games range from situations of refugees from different countries, politics over poverty and child labour and exploitation to equal opportunities. Although the games often deal with similar topics as they try to teach players various aspects of human rights, there are notable differences in the game design elements, i.e. narration, game mechanics used (especially rewards used within the games), aesthetics or facts and information presented.

Ayiti – The Cost of Life (Global Kids & Game Lab, 2006) was designed with the help of high school students to teach primary school children in industrialized countries the relationship between poverty and education. The simulation presents the player with the Guinnard family (parents and two children) who live in rural Haiti. The game principles are quite easy – the player has to decide who is going to work, who is allowed to attend school, and who should stay at home (and work at the family farm). Players can check on family members’ conditions including wellbeing, happiness, and education. Winning the game means that the family has to survive for 4 years (16 seasons). The game challenges typical Western beliefs as sending all children to school ends the family in poverty, sickness, and death (Ferri & Fusaroli, 2009, p. 36). This way the game mechanics show the complex interaction between the need for education in order to get a better pay and a less dangerous job, but at the same time show that education in these countries is quite expensive. This means working hard (and risking one’s health) is sometimes necessary. This vicious circle cannot be broken by simply telling people in less developed countries to send their children to school. What is quite remarkable about the game is that it comes with a lesson plan giving implementation suggestions for school use as well as background information about Haiti and the human right to education. The game is still used by many teachers around the world to teach about poverty in less developed countries.

Another game dealing with less developed countries is Darfur is Dying (Take Action Games, 2006) – a browser-based game about the crisis in Darfur. The game won the Darfur Digital Activist Contest sponsored by mtvU. It consists of two modes. In the first part, players choose a family member and are sent to forage for water. If the character is captured by a patrol of the Janjaweed militia, the player receives information of what would probably have happened to their character and is asked to select another family member. In the second mode, a refugee camp needs to be managed – the character has to use the water collected before for growing crops and has to build huts. When water runs out, the player returns to the first mode. In less than half a year after having been published, the game had been played by more than 800,000 people (Parkin, 2006).

After the successful creation of games which aimed at making people aware of social problems, game designers (and the organizations financing them) also came up with the idea of using games as a means of fund-raising. Free Rice (United Nations World Food Programme [UNWFP], 2007) is a website that provides game-like challenges by providing multiple-choice quizzes for different subject areas (e.g., English, mathematics, foreign languages, geography). For every question the user answers correctly, 10 grains of rice are donated via the World Food Programme. In 2007 more than 12 billion rice grains were donated (“Totals

| Freerice.com', 2015). As the website is constantly being updated, it still attracts many users. In the first 10 days of July 2015, nearly 60 million grains were collected by visitors who answered the questions. Players can sign up and keep track of their collected amounts of rice, as well as create and join groups. Meanwhile, there are more games working according to the "feel good" motto while playing and donating to charities (Basu, 2010). There are games that even go one step further. Half the Sky Movement: The Game (Frima Studio, 2013) was co-produced by Zynga and the Games for Change movement as part of a transmedia project. The game is about the empowerment of women around the world and addresses various problems women have to face in society. The player starts out in India playing Radhika, who must decide if she should confront her husband about the necessity of getting medicine for their sick daughter. Decisions taken by the player that empower women are rewarded by the game. This game – as usual for games in social networks – encourages players to invite friends to play as well, because sometimes support from other players is needed to complete a quest. To be able to play mini-games or travel within the game you need energy – which you can wait to be filled up after some time or you can buy energy using real money. Most of the money earned by in-app purchases is donated to charities. Additionally, there are some more incentives for players to come back and play the game. For example, when reaching a certain amount of points, books or medicine are donated, giving players the good feeling of being able to help by playing the game regularly. The launch of the game generated a huge media discussion, as the plot follows a book and a film dealing with the same topic (Holpuch, 2013; Wolonick, 2013). The game can be regarded as successful as measured by the number of players and donations. By June 2015 the game had 1.3 million players, reported 250,000 book donations, and generated a total of more than US \$500,000 in overall donations ('Half The Sky Movement Game', 2015).

Apart from using social networks, recent games also make use of the latest hardware developments. Outcasted (Köln International School of Design, 2014) is a stand-alone first-person-simulation making use of Google's Oculus Rift to enable a completely new game experience. Players take the role of a homeless person living on the streets of a western city. The player's task is to draw passing pedestrians' attention to the playable character in order to receive money. The only action players can carry out is moving their heads to try and elicit eye-contact. Some of the passersby will start talking. Some will even give the character money. Still, more of them will ignore, insult, or even get aggressive towards the character. The developers of Outcasted intend to make people feel what it is like to depend on another people's goodwill.

As values can be integrated into digital games in various ways (cf. Flanagan & Nissenbaum, 2014), these games differ in great extent from each other regarding game design and narratives, as well as how the topics and contents are realized (cf. Gabriel, 2016). The following sections will introduce the research carried out regarding games dealing with human right topics and show how the SGDA Framework can be used to find out if the game might support teaching about human rights.

METHODOLOGY

To find out about the potential of serious games, it is necessary to have a closer look at the underlying game design. For this research the Serious Game Design Assessment Framework (SGDA Framework) by Mitgutsch & Alvarado (2012) was used. This approach analyzes "a game's formal conceptual design, its elements, and their relation to each other based on the game's purpose" (*ibid* p. 121) and therefore helps to assess its possible impact. The SGDA Framework consists of six core components and puts purpose in the center of them all as this should be reflected in all other elements. The other five components are content, fiction and narrative, mechanics, aesthetics and graphics and finally, framing. The SGDA Framework was chosen as it puts emphasis on purpose when evaluating serious games which matches the objectives of human rights education. As Mitgutsch & Alvarado (2012: 123) state, purpose is not only reflected in the objectives and topic of the game but also in the designer's intentions as the latter wants to achieve an impact beyond

game-play. The game-design influences if there might be a possible transfer of empathy or change of behavior from the game into reality.

Before some of the games were analyzed according to the SGDA Framework, a quantitative online content analysis was carried out to identify those serious games that deal with topics of human rights (violations). Using the search-engine Google different keywords ("serious game", "human rights", "digital game", "immigration", "refugee", "poverty", "human rights violation" "migration" "child labour", "war", "homeless", "conflict" and "disaster") were used in different combinations and in the languages of German and English to find as many games as possible. Each search result was analyzed if it is a serious game that addresses one of the human rights. Only those games were included in the list whose purpose could explicitly be identified as wanting to convey a message focused on human rights (e.g. discrimination against certain groups, freedom of thought, right to education or rights for asylum seekers). Serious games that deal with human rights as a second theme were not included in the list.

RESULTS OF QUANTITATIVE ONLINE CONTENT ANALYSIS

The research resulted in a list of serious games on various human rights topics. As can be seen in Table 1, an emphasis on certain topics can be found. The most prominent topic is poverty with a focus on poverty in developing countries that introduces players to what it means if there is not enough food, housing and other available resources due to (civil) war or natural disasters. Another subgroup of the poverty theme deals with factors that might lead to poverty in the so-called rich countries. For example, these games might introduce players to people who do not earn enough money to pay the costs of daily life. Finally, a third sub-group of the poverty theme in games features homeless people in European or US-American countries by illustrating the challenges and obstacles these people have to overcome in their daily struggle to survive.

Many games also deal with topics around refugees, asylum seekers and migration – especially those which were published since 2013 due to the topic being present in media and also affecting many people's lives. These games partly deal with legal migration to another country and the game characters facing various challenges to get settled in their new surroundings. A second group of games in this category features people having been forced to leave their home countries and their risky journey into safety.

Generally, most of the games listed aim at creating empathy for the depicted groups by putting players in the shoes of asylum seekers, refugees, poor or homeless people. However, some of them use a more humorous way to make people aware of the topic (as for example Smuggle Truck or Penner Game).

TITLE OF THE GAME	TOPIC
3rd World Farmer	Poverty (developing country)
A Breathaking Journey	Refugees
A Closed World	LGBT
Against All Odds	Refugees
Antwargame	Terrorism
Ayiti – The Cost of Life	Poverty (developing country)
Bad Paper – The Debtor Game	Poverty (Western world)
Bury Me, My Love	Refugees
Cartlife	Poverty (Western world)
Coming Out Simulator	LGBT
Cool School: Were Peace Rules!	Conflicts
Darfur is Dying	Refugees
Das kostet die Welt	Landgrabbing
Durch die Wild Web Woods	Basics of human rights
Eliminate Child Labour	Child labour
Endgame Syria	Conflicts
Escape from Woomera	Refugees
Execution	Death penalty
Finding Home	Refugees
Food Force	Hunger
FreeRice	Poverty
Frontiers	Refugees
Garbage Dreams	Poverty (developing countries)
Geth2O	Water shortage
Global Conflicts Palestine	Conflicts
Go Goat Go	Poverty (developing countries)
Half the Sky	Gender discrimination
Hobson's Choice	Poverty, homeless people
Home Behind	Refugees, civil war,
Homeland Guantánamos	Refugees
Hush	Conflicts
ICED – I Can End Deportation	Refugees
Inside the Haiti Earthquake	Natural disasters
Layoff	Discrimination
Lim	Violence
Live88	Developing countries
Manichi	Transgender
Maria Sister's: Clean Room	Immigration
Marketplace Poverty Simulator	Poverty (Western world)
Mars Generation One: Argobit Academy	Ethical decision taking
Mission	Poverty, homeless people
Mission 4: City of Immigrants	Immigration
No Game!	Poverty
On the Ground Reporter: Darfur	Conflicts
One Hen	Developing countries
Outcasted	Poverty, homeless people
Papers, Please	Totalitarian regime
Parable of the Polygons	(Ethical) decision taking
Parable off he Polygons	Ethical decision taking
Peacemaker	Conflicts
Penner Game	Poverty, homeless people
Penner Game 2 %	Poverty, homeless people
People Power – The Game of Civil Resistance	Civil rights
Phone Story	Exploitation
PING – Poverty is not a Game	Poverty (Western world)
Quandary	Ethical decision taking
Refugee	Refugees
September 12th: A Toy World	Terrorism
Sim Sweatshop	Exploitation, Child Labour
Smuggle Truck	Refugees
Span	Poverty (Western world)
Survival	Refugees
Sweatshop	Exploitation, child labour
Syrian Journey	Conflicts
The Invisible Hand	Fair trade
The Migrant Trail	Refugees
The Unfair Factory	Exploitation
This War of Mine	War
Ultis Dimitrovs	Poverty, homeless people
Unstoppable	Discrimination
Wildfire	Poverty, gender discrimination, education

Table 1. Overview of serious games dealing with human rights

Source: Authors.

Games were chosen for analysis with the Serious Games Design Assessment Framework based on either their publication in 2016 or 2017, or according to their popularity, as determined by the frequency of references in newspaper articles or research papers. The following analysis of *Bury Me, My Love*, published in 2017 and mentioned in many articles, is an example of a game that represents both criteria.

ANALYSIS OF BURY ME, MY LOVE

Bury Me, My Love (Playdium 2017) is a smartphone app for iOS and Android that tells the story of a young woman called Nour who flees Syria and attempts to reach Europe in safety. The app is an interactive story told via a communication tool similar to WhatsApp. The player takes on the role of Majd who stays behind and can only occasionally text with his wife, send/receive photographs or emojis while she is on her dangerous journey. So, the player can provide Nour only with advice and support being able to influence her decisions and moves to a certain extent. Florent Maurin (2017:1), the designer of *Bury Me, My Love*, calls the game “a reality-inspired game, a fiction directly derived from real events [...]”. It is based on an article Maurin read

in 2016 and on the actual experiences by a refugee from Syria who went on basically the same journey Nour has to undertake within the game. The title refers to an Arabic farewell meaning “Take care”.

Purpose

The topic of the game is to show players the reasons why people leave Syria and which hardships they have to endure when these people try to flee to a safe country. The designers of the game state their purpose as following:

“Our two main characters, Nour and Majd, are fictional. They do not exist, or rather, they exist collectively. They are a multitude of men, women and children: Dana, her mother, her brother-in-law... as well as thousands of others who flee their country – or watch their relatives flee – all in hopes of finding a better life in Europe. This story is about those who achieve that goal. It is about those who don’t. It is about those who die trying. It is about the world around us. Something which we hope will lead you to keep pondering on after it is over.” (*‘Bury me, my Love – A Story of Love, Hope and Migration’*, n.d.)

The game provides 19 different endings, thus ensuring that the decisions taken by the players really matter as the game takes different turns depending on the options chosen. Only one ending results in escape whereas the other 18 either end in death or imprisonment of Nour.

Content and Information

As the game relies on accounts by someone having fled from Syria, the information presented within the game is realistic and evidence-based. *Bury Me, My Love* is mostly based on text, which means there are many data and facts used. The information is presented along the way, integrated in the story and relies on facts as well as personal experience by people interviewed for the game. However, to make the conversation between Nour and Majd more natural and realistic, prejudices and judgmental expressions are used as well. Apart from the text, the game provides a map from which the player can see the places Nour has already traveled to as well as some information about the historical or geographical importance of the place and relevant information regarding Syrian refugees. For example, when clicking on Beirut within the map, you get the following information: “As of March 2016, there were over 305000 Syrian refugees officially registered in Beirut. They accounted for 16% of the city’s population.” The app tracks the progress and the journey using the map as a diary and thus changes from game to game, depending on the decisions taken by the player.

Game Mechanics

As per Sicart (2008: 6) game mechanics is defined “as methods invoked by agents, designed for interaction with the game state” which subsumes the establishment of the rules but also the in-game goal of the game, the operation of the reward system, obstacles/challenges within the game, the difficulty balancing and the win conditions” (Mitgutsch & Alvarado, 2012). The goal in *Bury Me, My Love* is to make decisions which enable the non-playable character Nour to arrive Europe safely. The players can only choose between a limited choice of answers or dialogue-parts, sometimes even choose between two different emoticons to send and thus cannot foresee how the decision will influence the story (or if Nour will even follow the piece of advice given by the player). The only feedback the player gets is the advancement Nour makes or the difficulties she has to face as a result of the decisions taken. There are no points or badges awarded, no levels. Advancement can only be seen from the map. However, there are some variables which will influence Nour’s decisions and actions: her morale, her relationship level with Majd, her budget and the presence or absence of specific objects in her inventory.

Fiction and Narrative

The fictional context and the fictional world created is crucial for *Bury Me, My Love*. The whole story unfolds right from the beginning just by conversations between Nour and her husband. As the game advances, the player learns more and more about the circumstances and reasons why only Nour sets out on the dangerous journey and what the couple experienced in their past. The player takes on the role of the husband, staying behind with his mother in a war-torn country, being unable to help his wife on the journey apart from giving support and advice. The game also enables players to choose the game’s speed. If

the “pseudo-real time” mode is switched on, the player needs to wait for the story to progress when Nour either does not have any network connection or needs to do something else. The game screen says, “Nour is busy.” When she needs to talk to the player, a notification is sent. As the player takes on the role of Majd, it helps perspective-taking which “is the active consideration of an outgroup member’s mental state, points of view, and motivation” (Darvasi, 2016: 7).

Aesthetics and Graphics

These elements refer to the audiovisual language of the game and thus “define the overall formal aspects that frame the content (information), the fiction (the world and characters of the game), the framing (target group), the setting, and the mechanics (instructions, rewards)” (Mitgutsch & Alvarado, 2012: 126) The game uses a cartoonish style for depicting the characters (photographs and selfies sent in the game or the profile picture of Nour). The main game screen looks like a typical smartphone messenger app, showing Nour’s messages in white font on a brown background and Majd’s texts in black font on a white background. All conversations can be read up any time in the game. On the start of each day within the game, the date (day and month) is given. Sounds used are also similar to those of a smartphone messenger app. The map used to show important points in Nour’s journey is similar to maps found on the internet (f.ex. Google maps). Although the characters are depicted with drawings, these are so detailed and natural, so that players get a feeling who Nour is. Aesthetics and graphics match the story and the framing without any contradiction.

Framing

The last aspect of the SGDA Framework deals with the framing of all the aforementioned elements in relation to the target group, as well as their play literacy and the broader topic of the game. The game does not address a specific target group since anyone interested in the game’s topic should be able to play it. The game controls and the user interface are easy to use – there is not much the player can do anyway. Most of the time the player’s task is reduced to reading, as not all of Majd’s messages can be influenced. So, players need to be able to read quite well in order to follow the unfolding story. The topic of the story – Syrian refugees and their dangerous journey to Europe – is addressed in an emotional way and relies on the player’s bonding with Nour and wishing for her to arrive safely in Germany (which is the target destination). There are no additional educational resources provided – indicating that the game was not directly meant to be used in classrooms. As the app provides 19 different endings and a lot of different conversations, depending on the choices taken before, there is a high degree of replayability.

CONCLUSION

As stated in the SGDA Framework, the game’s purpose needs to be reflected in the individual elements to present a coherent and cohesive game system. When analyzing the relation between the game’s content, its fictional context and the mechanics, the following can be stated: The purpose of the game is to show players which obstacles and dangers Syrian refugees have to overcome in order to live a life in safety. The play wants to create understanding and empathy by showing how difficult this goal is to achieve. By telling about the lives of refugees and those left behind in a very personal way, the game succeeds in providing information and evidence, without leaving the narrative structure. The game’s disadvantage of leaving the players in a passive role without allowing them many choices (as only pre-formulated answers can be chosen from time to time) is at the same time mirrored by the actual impossibility of influencing a beloved person’s fate because of the tenuous connection to a smartphone. Thus, the game shows how important this device becomes for refugees as it is often the only connection to their family and friends. Of course, the impact of the game to evoke empathy with the players, cannot be answered by simply analyzing the game elements. However, this analysis shows that a game like *Bury Me, My Love* has a great potential to influence players and address the objectives of human rights education in the before-mentioned category of learning by human rights.

As shown in this paper, many serious games address topics that cover human rights education. Many of them like the example of *Bury Me, My Love* discussed, try to evoke empathy with the player. Not all these games reach this aim. This is specially the case when the purpose of the game is not reflected in the other elements as stated in the SGDA Framework. However, to make sure that players really learn something from the game, guided reflection and discussion of the game content might be needed additionally.

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Reframing Refugee Characters

Empathy and Agency in Interactive Narratives

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Abstract

By allowing viewers to interact with stories, interactive films have revolutionized how viewers engage with social issues and events. The emergence of immersive technologies and interactive storytelling has transformed traditional storytelling forms and methods. These technological advances have rendered interactive storytelling more complex by challenging users to reexamine understandings of the mediated world. Consequently, basic media literacy skills are necessary to benefit from these projects dealing with refugees' stories.

Although interactive storytelling creates new forms of social engagement, the question of which social issues or subjects are most effectively addressed through interactive narratives remains. How do refugee stories and discourses contribute to interactive engagement? This essay analyzes a series of interactive projects focusing on refugees' storytelling, politics, and aesthetics in order to examine their socio-political engagement and their unique attributes. Refugee stories hold a strong

emotional appeal, positioning them as ideal for interactive narratives. How do unique refugee experiences of displacement and disarray engage creators and viewers/users/players?

This essay argues that refugee storytelling interactivity contributes significantly to viewers' engagement with social issues and characters. While creating empathy and responsibility, these projects allow users to connect with people far removed from their own lived experiences. Characters with well-known and reliable stories make users feel closer in the position of moral concern to their situation and can instigate political accountability for their future. In interactive narratives, refugee characters redefine agency and storytelling. They offer the ability to recreate history, engender a change in the world, or revise a topic with a sense of justice toward dependable and trustworthy characters.

Keywords

social engagement, interactivity, interactive web documentary, refugees

1. Introduction

Interactive films have revolutionized the ways in which audiences can engage with social issues and events. Filmmakers have explored the potential of interactive films to enhance storytelling and elaborate the point of view of characters. This essay focuses on refugee storytelling engagement in interactive films. It raises critical questions

about the nature of interactivity in the context of refugees.

The definition of interactivity is significant when analyzing refugee characters. Aston (2016) argues that interactive documentaries offer a 'framework of possibilities.' What specific possibilities for refugee narratives can be found in interactive projects that cannot be achieved through traditional linear forms? How can refugees engage with the rhizomatic, fragmented, and open-ended stories of interactive media?

This essay explores the possibilities of interactive refugee projects not achievable through traditional cinematic linear narratives. It analyses several interactive films, including documentaries, multimedia, virtual reality projects, and games. Over the last decade, numerous interactive films have featured refugees. However, most could be categorized as modes of documentary.

Interactive films about refugees provide a first-hand experience of real-life-threatening situations. These films capture the characters' emotions, provoke the audience's compassion, and encourage decisions based on what they have seen, such as the game *Papers, Please* (2013) and the augmented reality project *Terminal 3* (2018). Other interactive projects, such as *Living Los Sures* (2014), provide a more intimate, individual portrayal of characters. *The Shore Line* (2017) utilizes different media and texts to provide better and more complete knowledge through a first-hand approach and analysis. These projects aim to provoke debate and dialogue; they encourage users to get involved and help those in need. In contrast, other interactive films such as *Jerusalem*, *We Are Here* (2016) and *Refugee Republic* (2012) reinforce the idea that each refugee is unique with their own history. These films instill a sense of unity. They utilize a multimedia approach with hand-drawn and interactive maps, sketches, photographs, and brief video impressions.

Why do interactive and immersive practitioners find refugee characters so captivating? Why do they create engaging narratives around them? How are refugee stories unique and appealing to viewers, users, and players? How do these narratives contribute to social and political

engagement? Do these films promote a sense of "becoming otherness" or merely entertain through moments of "awareness"?

In interactive narratives, refugee characters not only redefine agency and rewrite traditional film storytelling tropes, but they also recreate their history/fate. Refugee stories can refashion the world with a sense of justice through dependable, vulnerable, and trustful characters. These works explore the moral concern and political responsibility of the viewer/user/player towards refugee characters and their futures. Refugees' storytelling, politics, and aesthetics require analysis to understand the potential of interactive films to engage audiences with social issues and events and to promote political engagement and activism.

2. Displacement and Vulnerability: Reframing a Character's Storyline

The decision to leave one's homeland is a difficult and heart-wrenching choice. Refugees flee their home countries for a variety of reasons, such as war, persecution, or economic hardship, all of which have made their lives unsafe. Their life on the other side of the border may also be fraught with danger and suffering. The risk of death, loss, and trauma is high. The uncertainty of the future adds to their overwhelming situation.

The global refugee crisis has resulted in many changes in national asylum laws, sheltering, and border control measures. As a result, applying for refugee status has become increasingly complex and lengthy, with asylum seekers subject to compulsory stays in overcrowded and poorly equipped refugee camps, remote locations, and detention centers (Kreichauf 10). Despite their differences worldwide, these camps and shelters create dangerous vulnerabilities due to a lack of security, privacy, protection, poor living conditions, inadequate healthcare, and necessities such as food and water.

Giorgio Agamben argues that the vulnerability of refugees results in their loss of citizenship and agency, fundamental to human existence. He contends that nation-states see human beings as "naked life" in the political order. Without citizenship, individuals cannot exist in the contemporary world. Agamben elaborates on being stripped of citizenship in concentration camps in Nazi Germany, which he analyzes serve as spaces of control and denationalization (93). He highlights the plight of refugees who have lost all rights and protection. Asylum seekers are forced to abandon their homes, families, and communities, denied the basic human right to protection and dignity. Their lack of identity and citizenship creates a profound sense of loss and disconnection, leaving them traumatized, frightened for the future, and vulnerable to exploitation and marginalization.

Hannah Arendt draws attention to the struggles of stateless refugees who have lost all rights and protection in "We Refugees." Arendt's perspective differs from Agamben's: she emphasizes the importance of assimilation and integration into new communities rather than solely focusing on the loss of citizenship. Arendt argues that refugees should be allowed to rebuild their lives and become active members of their new societies. As a newcomer, Arendt had no hope or desire to be assimilated into any new country (Agamben 90). Although speaking to only one individual's experience, this idea represents the mass phenomenon of alienable human rights (Agamben 92). Refugees live in the most profound difficulties where they are completely deprived of belonging and forego the protection of their homeland.

From a humanitarian perspective, refugee camps provide shelter and security for displaced individuals and help maintain family and community connections. But from a political perspective, camps control people's mobility and privacy through surveillance and physical barriers (Kandylis 13). Isolating refugees in these spaces contributes to a lack of insight and understanding

about their experiences, perpetuating their vulnerability and societal alienation.

In these protected yet isolated spaces, society ignores their inhumane living conditions: harsh rules and lack of privacy and mobility that refugees are forced to reside in for long durations (Kandylis 18). This "other displacement" leaves newcomers vulnerable yet again while distancing them from society. This practice alienates the outside populations about human suffering.

3. Promoting Engagement and Empathy through Multimedia Storytelling

The interactive documentary format offers a unique and powerful way to tell stories about marginalized communities and social issues. By providing a highly engaging immersive experience, i-docs offers the audience the chance to experience the stories of migrants and displaced people on a more personal and intimate level. Unlike traditional documentaries, which often rely on a single voiceover or interviewees, i-docs incorporate multiple perspectives, multimedia elements, and interactive features. As a result of this heterogeneity, they create a more comprehensive and emotionally resonant narrative. One strength of the i-doc format resides in its ability to present information in various ways through videos, images, games, text, and audio recordings. This multimedia approach mobilizes engagement with the material on multiple levels to create a more sensory and immersive experience.

In the webdoc *Refugee Republic* (2012), the creators use video to give faces and voices to refugees, creating intimacy and connection. The camera focuses on the individuals' faces, centring them in the frame to emphasize their individuality and to break down the idea of refugees as a mass. Each person is introduced with a unique musical tune. A wide range of narratives is explored, further emphasizing their individuality. Various media formats explore the project "routes" (fig. 1),

from video interviews to hand-drawn illustrations. This strategy creates a layered, nuanced portrayal of refugees' experiences. The "Camp Smart Route" starts with a picture of a woman named Kurd singing in her language. She expresses that she is homeless and a refugee. She says she cannot live far from her love of her mother. Poet and educator Alan Esber chose to impart his knowledge to the camp's youth as a volunteer teacher. He persisted even without pay instead of waiting for assistance from relief organizations.

The "Camp Construction Route" portrays the story of Firas Al-Khatib. During the war, Firas was forced to flee to Iraq. He left a well-paying job behind. Facing inadequate shelter conditions in the camp, Firas sold building materials to improve living conditions. As his business thrived, the overseeing organization shut it down, deeming it harmful to their reputation. These depictions humanize refugees. They give a voice and face to a frequently marginalized population.



Fig. 1: Refugee Republic's routes.

The interactive documentary format reverses the roles of the audience and the migrants. In Roxham (2017), the audience is forced to assume the position of onlookers as the migrants take the lead in telling their stories to the Canadian police. The virtual reality component of the documentary immerses the user into the experience by digitally recreating Roxham Road, a significant location on the Canadian American border. This reenactment is accentuated by the migrants' dissonant voices and the haunting, discordant music, mirroring the uncertainties asylum seekers face while

attempting to cross the Canadian border. The audio intensifies the user's experience by personalizing the migrants' stories and opens up an understanding of their challenges.

In these immersive experiences, the viewer/user/player is thrust into the heart of the stories, able to hear the raw emotions and desperate pleas of the individuals involved (fig. 2). One such experience places the audience alongside a pregnant Nigerian woman attempting to cross the border with her suitcase. Her anguished cries and desperate entreaties to the officers resonate, only to be met with the harsh reality that she will be arrested if she crosses. The subsequent sounds of her arrest and the car driving her away underscore the enormity of the officers' lack of compassion. They appear to see her only as a consequence of their duty, focused solely on arresting border-crossers.

Another poignant account features a man struggling to repeat his rights back to an officer, revealing his likely inability to comprehend the information provided. The palpable fear and confusion in his voice are striking. In a different story, a family pleads with officers for help, explaining the danger they face back home. Heart-wrenching sounds of a baby crying in the background of another story amplify the tension as officers arrest a bewildered and frightened family. In yet another account, a man determined to cross the border admits he is undeterred by the legality, his voice quivering with embarrassment and unease. Although the officers seem empathetic, their hands are tied, highlighting the need for policy and legal reform.

Many migrants face these harrowing situations, confronting unfamiliar officers and enduring months of uncertainty about their fate. These experiences allow viewers/users/players to truly hear the voices of those involved, bringing to life the urgency and complexity of these border-crossing narratives.



Fig. 2: Roxham Road's immersive interfaces use blankets to protect the migrant's identity.

This format presents potential problems to users' continued engagement with interacting with the project. Constant changes in the flow of information and stories require user input which can be challenging for those with shorter attention spans or preferences for quick concise information. Social media and other new media outlets have conditioned users to expect immediate gratification, which is not always possible in interactive documentaries. Interested users may not delve deep into the issue, limiting understanding and the overall effectiveness of the documentary. To overcome these barriers, interactive documentaries can deploy innovative engagement techniques such as incorporating gamification elements, adding clear navigation, and providing information summaries to facilitate learning.

Although interactive documentaries may lack the wide reach of viral videos or photos, their interactivity is a powerful tool for raising awareness about important issues. For example, in

Borderland (2014), the audio component can be commented on and shared to allow interested individuals to spread the word about the plight of migrants and involve others in the cause. This optional resource allows for sharing different perspectives, adding to the authenticity, immediacy, and impact of the project.

In *Bruderland* (2014), the director interviewed various immigrants from the German Democratic Republic, such as contract workers, students, and politicians, in order to capture their experiences in their new society. The documentary's interactive format allows users to choose which interviewee to listen to, a more personalized credible account of immigration history. The interviews focus on the racial marginalization and discrimination interviewees face as a result of strict surveillance of their living quarters, lack of privacy and freedom, and limited opportunities for socializing due to strict rules and racial barriers. This variety of videos, however, might lose the attention of users who prefer quick, easy-to-digest information.

Bruderland strengthens the agency of *postmigrants* by portraying them as self-determined individuals who proactively address challenges and devise solutions. Weber (2023) asserts that the variety of portraits contributes to the development of intricate *postmigrant* narratives. The author emphasizes the importance of constructing complexity in web documentaries, which plays a vital role in empowering migrants by facilitating the sharing of their stories. By fostering relational complexity in participatory web documentaries, multifaceted and polyphonic perspectives can be generated, ultimately promoting self-empowerment and enhancing communication with a wider audience.

The Shore Line (2017) assembles first-person accounts to foster empathy and understanding toward those affected by climate insecurities. Through individual interviews, the documentary humanizes the struggles of migrants, refugees,

and first-generation children, rendering their experiences more accessible to a broader audience. It highlights the disproportionate impact of climate change on individuals living in rural areas and with lower socioeconomic status.



Fig. 3: Sagar Island Women's Collective, India

Through these personal stories, the chapter "Currents of Migration" illuminates the intersection of environmental and socio-economic issues. Ioane Teitiota and his family were forced to relocate from their sinking homeland of Kiribati to New Zealand, highlighting the crisis of climate refugees. Despite their desperate escape from relentless storms and rising waters, their plea for refugee status was denied, exposing the reluctance of governments to confront the impending influx of climate refugees. Amidst these adversities, a beacon of hope emerges in the Sagar Island Women's Collective (fig.3). They ingeniously preserve their crops from saltwater floods by pre-soaking rice grains in salt water, a practice gaining traction in other affected communities.

The Shore Line advocates for political and government action to combat climate change and protect citizens. It highlights the urgent need for climate refugee processes, governmental environmental policies, and public health measures. The documentary contributes to a critical conversation on climate change and its effects on communities worldwide by raising awareness through personal and grounded micro-stories which generate support for their struggles.

4. Redefining Agency and Morality through Player's Social Engagement

The emergence of refugee characters and their stories in contemporary media offers a new intervention into more traditional approaches to political storytelling. These characters and narratives are now presented in interactive forms, allowing users to engage more deeply and even impact their fate. This redefinition of agency offers a unique opportunity for users to explore complex political issues surrounding refugee communities in a more immersive and engaging manner. For example, the augmented reality project *Terminal 3* (2018) allows users to explore the stories of individuals passing through a fictional airport terminal, creating a powerful experience emphasizing border control policies' human impact. Similarly, the game *Papers, Please* (2013) puts users in the role of a border control officer (fig. 4) in a fictional dystopian country, forcing them to navigate complex moral decisions that highlight the challenges faced by refugees seeking safety and security. These innovative storytelling approaches demonstrate the media's potential to serve as a powerful tool for social change and advocacy.

The game *Papers, Please* portrays the fear of terrorism and illegal migration as justifications for strict immigration controls. The player's task is not only to screen out potential threats but also to exercise empathy and fairness towards characters who may be genuine refugees seeking asylum. The consequences of missing crucial information or making the wrong judgment are not limited to the game world but also affect the player's score and, ultimately, their chances of winning. The game goes beyond international politics or war to explore the complex interplay between individual morality and the institutional power of immigration control.

The playable character in the game is a border officer from the fictional communist country of Arstotzka. Throughout, the player encounters

various political figures such as border patrols, ranking military officers, and revolutionaries. As the player navigates through the game, various choices are offered: whether to help a revolutionary, serve their homeland, or escape the country. The characters who challenge the player's sense of morality are most prominent. These characters disrupt the monotony of the player's bureaucratic job and prompt them to consider the human consequences of their actions. Although the game's objective is to remain detached and unemotional, it continually tempts players to make decisions based on their emotions or values. The game's mechanics include accepting bribes or succumbing to emotional pleas. These test the player's moral compass and reveal the complexity of making ethical decisions in difficult situations. *Papers, Please* explores individual morality and systemic policies' impact on ordinary people's lives.



Fig. 4: *Papers, Please* game's interface.

Digital games possess significant potential to address social and political issues through embodiment and a critical documentary approach, as demonstrated by Cansu Nur Simsek's analysis of Abdullah Karam's autobiographical adventure game, *Path Out* (2017). This game chronicles Karam's harrowing escape from the Syrian Civil

War in 2014, skillfully intertwining reality and fantasy to deliver an immersive experience. Simsek (2023) highlights that by integrating video commentaries, interactions with non-player characters, and thoughtful game mechanics, *Path Out* effectively challenges prevailing narratives surrounding Syrian migrants and prompts players to critically engage with pressing global socio-political challenges.

Unknown people with well-known struggles and reliable stories make the viewer/user/player closer to the morality of the situation and spur thinking about how to be politically responsible for the future. These authentic stories of real people function as a powerful tool to create awareness and foster empathy, particularly when these lives are so far removed from the viewer's own lived reality. This connection with distant worlds calls attention to the limitations of traditional cinematic narratives that sometimes fail to capture the audience's attention. By immersing the audience in these unfamiliar challenging circumstances, interactive media offers a new way to experience the world and understand complex social and political issues. Through these narratives, viewers/users/players have the possibility to gain insight into the lives of others, build empathy, and be inspired to take action toward creating a more just and equitable world.

5. Humanizing the Subject and Engaging the Audience

Thierry Benjamin (2021) argues that interactivity is evolving beyond a technical definition and taking on more social meaning. This shift in the concept of interactivity is not entirely new, as interpersonal communication has always been interactive. However, the increasing salience of moral and ethical decision-making in interactivity is significant. As users interact with social and human stories, their choices hold political implications and require careful consideration. As a result, it is important to understand the evolving nature of interactivity and its impact on the ethical

and political dimensions of media use. This means that the traditional view of interactivity as merely a technical feature is insufficient—we must now also consider its social and moral implications.

Interactivity is not so simply reduced to a technical feature but now constitutes a central component undergirding the politics of engagement.



Fig. 5: *Jerusalem, We Are Here*'s walk through past and present.

Jerusalem, We Are Here (2016) is a political i-doc that sheds light on the plight of Palestinians who were forced out of their homes during the Israel and Palestine nakba in 1948. The project employs a unique approach to web documentaries. It utilizes 360-degree shots that allow viewers to immerse themselves in the camera work as the documentary captures the city of Jerusalem and its remains before the crisis. Viewers can choose their own path, like a Google Maps experience, as they explore tours of certain old villages in Jerusalem and occupied Palestine (Fig. 5). The audio accompanying the visuals has a raw, live feel, as if the viewers were on a guided tour through these old neighbourhoods' streets.



Fig. 6: *Jerusalem, We Are Here*'s creators.

To begin this interactive documentary, the creators introduce themselves and share their personal experiences in guiding the viewer through the journey (fig. 6). The documentary then delves into the oldest operating theatre in Jerusalem, owned by Palestinians until the Palestine-Israel conflict resulted in its transfer to Israeli ownership. From there, the tour explores several locations, including Dajani, Al Khalidi, Aweidah, Greek Club, Egyptian Consulate, Louisidis, Karmi, and St. Simeon Monastery. Each site is accompanied by historical information and multimedia. The narrators provide their own insights and personal experiences to bring these locations to life.

Beyond these technical innovations, the filmmakers convey the human element of the displaced Palestinians and their struggle for their rights and lives. They focus mainly on the events and locations that took place in Palestine before the Palestinian-Israeli conflict erupted. They discuss the sites and potential outcomes but do not address the events that led to the conflict. The project seeks to preserve the memory of a Jerusalem that no longer exists and celebrate the city's former multicultural vibrancy. It humanizes individuals who have lost everything. Regardless of where the audience's sympathies lie, the project does not seek to change minds or allegiances. Instead, the project's design strives to awaken empathy and compassion in viewers, urging them to see the Palestinians suffering a grave injustice. Through a real-time map experience, *Jerusalem, We Are Here* demonstrates the potential of technology to connect the viewers/users/players to distant places and people in order to foster a deeper understanding and connection to the past.

The webdoc *Living Los Sures* (2014) allows audiences to make choices while they explore the colourful multiethnic neighbourhood of Williamsburg, Brooklyn. Viewers select the setting and subjects to control the pace of the stories. These choices render a more personalized and

engaging experience, fostering deeper connections to the community and its residents.

The *Shot-by-Shot* segment (fig. 7) serves as an intuitive, scroll-based database layout, enabling users to smoothly explore the 1984 documentary film *Living Los Sures*' collection of 326 shots. Distinct pages are allocated to each shot, exhibiting stories, images, and videos linked to the specific shot's content from 1984 to 2014. By employing a WordPress back-end and a sophisticated JavaScript front-end, an intermediary retrieves relevant data from the database, converting it into an engaging and interactive front-end experience for users.

The films are crafted with various cinematic techniques that enhance the storytelling and immerse viewers in the experience. The use of sound design creates an atmospheric and realistic soundscape, transporting viewers into the heart of the neighbourhood. The films incorporate stunning visual imagery, from close-up shots of food being prepared to aerial views of the bustling streets, sculpting a rich and authentic sense of place.

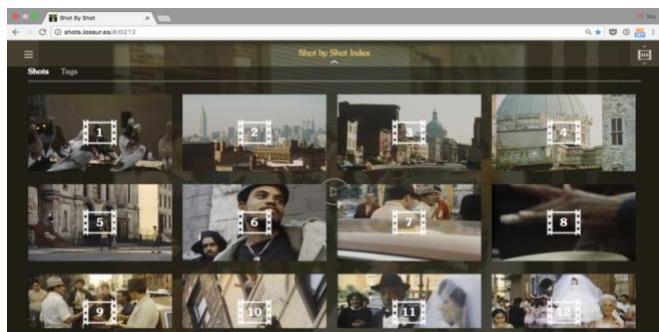


Fig. 7: Index of *Living Los Sures* segment *Shot by Shot*. Image by UnionDocs

One of the *Living Los Sures*' segments entitled *89 Steps* (fig. 8) introduces Marta Aviles, a 60-year-old woman who guides, narrates, and provides viewers with information about her neighbourhood. Users click and hold an icon to prompt Marta to climb the eighty-nine steps to her apartment or let go and rest. As Marta ascends the stairs, her laboured breathing

suggests she needs a break. This diegetic sound prompts viewers to determine the storytelling process based on the pace they want to set. If viewers choose to give Marta a break, they are rewarded with anecdotes about her childhood and philosophical reflections on family and aging, deepening understanding of her. This interactive element enhances immersion and offers a sense of agency in the storytelling process.

The project represents a prime example of how interactive documentaries can revolutionize experience and engagement with film. By actively allowing audiences to participate in the storytelling process, *Living Los Sures* provides a more intimate connection to the subject matter, ultimately creating a more meaningful and impactful viewing experience.

6. Conclusion: A Sense of Justice

Refugee characters and their stories have propelled interactive films to renovate their political storytelling and to provide the viewer/user/player with the power to recreate stories and explore the fate of the characters. The intense emotional connection created between the viewer/user/player and these displaced individuals who live worlds away from most audiences' lived realities challenges traditional cinematic narratives' failure to provoke genuine moral reactions.

Interactive narratives featuring refugee characters and their stories offer a fresh perspective on traditional cinematic forms of storytelling. These stories can inspire change and foster a sense of justice for refugees worldwide. Although these refugee characters may lack recognizable faces or names, their poignant stories allow viewers, users and players to connect with their moral and political plight, urging responsibility for the future.

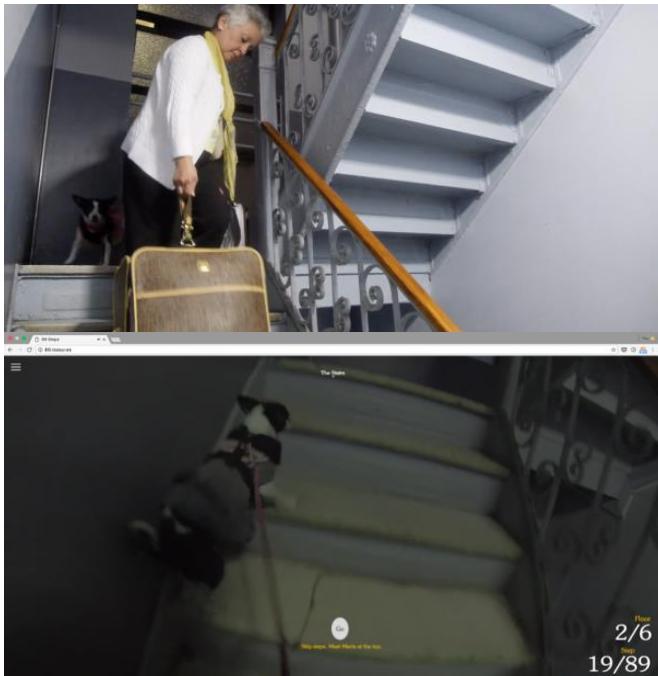


Fig. 8: Marta Aviles climbing the 89 steps to her apartment and the interactor's point of view.

As a sensorial medium, interactive films encourage active audience participation and engagement. As reliable and vulnerable characters, refugee stories establish powerful emotional audience connections that provide a unique opportunity to empathize with refugees' struggles and develop a deeper understanding of their experiences. Through making choices and experiencing the consequences, the audience can become invested in the narrative, leading to heightened story engagement and involvement. By situating the audience in the role of decision-makers, interactive films offer the possibility to challenge preconceived notions and encourage critical thinking. They can contribute to the development of care and fairness.

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LEARNING ABOUT REFUGEE LIFE WITH EDUCATIONAL VIDEO GAMES

Abstract. In recent years, scholarly investigations have yielded the consensus that video games possess multifaceted attributes that extend beyond their conventional perception as mere sources of leisure, diversion, and entertainment. The immersive nature of video games has led to increased interest in their use as platforms for engaging in discourses across a diverse array of subject matters with the potential to reach a wider audience and generate meaningful impact. Combined with the sense of presence and ownership that allows players to be placed in the shoes of characters grappling with social or political issues, video games are converting into an effective and accessible tool for learning and engagement with pressing cultural, social and political issues. Current research aims to understand better the potential of educational video games to address these pressing problems, in this case, the refugee crisis, to evoke empathy and raise awareness by looking at the problem 'behind the scenes' with an audience that initially was not interested in the topic. This qualitative study (N=78) employed the narrative research method to examine experiential participatory learning with participants playing the educational video game *Against All Odds* developed by UNHCR. By immersing players in this virtual experience, this game was created to educate and encourage a greater understanding of the realities faced by refugees, the complexity, and dangers of the refugee experience, as well as the reasons behind their displacement. The promising results of the research show that a video game can address serious social issues by creating a simplified but still dynamic scale model of refugee reality. Participants reported an enjoyable gaming experience, newfound interest in the issue at hand, increased empathy toward refugees, and motivation to help people in need. The study illustrates that by putting players in the shoes of struggling characters, video games could make learning about these topics more engaging and, as a result, more accessible and appealing to a wider audience, including non-gamers and people previously disinterested in the topic. These results invite educators, researchers, and scholars from the fields of education, game studies, social sciences, and cultural studies to explore the potential of video games as a possible tool for engaging students, addressing social issues, raising awareness, and fostering empathy. The article also identifies several prospective domains for future research.

Keywords: video games; refugee crises; impact of video games; game-based learning; educational technologies; non-formal education.

1. INTRODUCTION

The problem statement. Today, there are 90 million forcibly displaced people worldwide, more than ever in modern history, representing almost 1% of the world's population and is equivalent to the 14th most populous country in the world [1]. These people have been uprooted from their homes and fled extreme dangers and life-threatening circumstances. Displaced people are trying to survive not only the harrowing challenges of migration itself. Harmful deterrence policies are put in place by governments trying to keep out migrants and asylum seekers at all costs. Governments worldwide have expressed concerns about the arrival of ethnic cultures that threaten the welfare state, social and cultural cohesion, the existing political and economic power structure, and employment opportunities that lead to refugee crises in the EU and the US [2]. At the same time, several initiatives have been established to foster a better understanding of refugees and immigrants among local populations. For example, advocacy organisations and NGOs conduct awareness campaigns, social media campaigns, and public events to raise awareness about the contributions and struggles of refugees and immigrants, encouraging local communities to embrace diversity and support integration

efforts. As such, the United Nations International Children's Emergency Fund (UNICEF) launched an initiative to challenge stereotypes about refugees and migrants and start learning about acceptance through video games. This initiative aims to allow children of diverse backgrounds to focus on what makes them similar rather than different in a safe and fun gaming environment [3].

Analysis of recent studies and publications. The immersive nature of video games has led to an increased interest in using them to address serious and sensitive social issues. A wide range of video games have been designed to create empathy by placing players in the shoes of asylum seekers, refugees, and poor or homeless people, demonstrating that the most challenging topics can be contextualised to create meaningful and engaging gaming experiences [4]. These video games foster critical thinking and encourage reflection about what is happening in the world [5]. Thanks to their technological format, video games can construct sophisticated messages that combine social, political, economic, and historical factors of the problem at hand and can reinforce social-activist messages [6]. Many types of video games evoke compassion in players by providing an experience that allows them to deeply examine the experiences, thoughts, and feelings of the character of the game [7]. In video games, players adopt the perspective of another identity (an in-game character) and gain insight into its motivation. It brings players into contact with points of view that they would otherwise never have imagined, allowing them to weigh these views against their own beliefs. In addition to this inward-turning, games also make players look outward at the world through the eyes of the game characters.

This perspective-taking helps players negotiate social complexities, diminishes biases, improves intergroup attitudes, and encourages them to view outgroups as more "self-like" and themselves as more "outgroup-like" [8]. It has been observed that after playing *Darfur Is Dying*, students aged 10 -14 were more willing to help Darfurian people than those who had merely read about the situation in Darfur [9]. Those who played *Homeless: It Is No Game* felt greater sympathy for homeless people [10]. Similarly, playing the *Peacemaker* affected a positive attitude change toward foreign nations [11]. After playing *Poverty Is Not a Game (PING)*, almost a third of those who previously described themselves as 'not interested' in politics considered themselves 'interested' in politics [12]. In the same vein, Tawa [13] described the development of understanding the concepts of race, people of colour experiences, and white privilege in real life after the experiment with white students played the virtual world of *Second Life*. Nijdam [14] examined the interactive fiction *Bury me, my Love* to determine to what extent games on forced migration can be set in dialogue with larger debates on forced migration. Furthermore, *Bury Me, My Love* has shown great potential to influence players, evoke empathy, address the objectives of human rights education, and help reduce prejudice towards refugees [15]. In a similar manner, *Papers, Please* was demonstrated to influence attitudes towards immigration [16]. Due to these results, there are great expectations about the usefulness of video games to bring positive change to society due to their ability to provide a safe-to-fail space, which can drastically impact social processes [17], [18].

The research goal. The current research focusses on the specific context of the use of video games. It seeks to better understand the potential of educational video games to address pressing global problems, in this case, within the realm of refugee-related challenges, to evoke empathy and raise awareness by looking at the problem "behind the scenes" with the audience that initially was not interested in the topic. The present research also aims to expand on previous studies by investigating the effects of video game use on end users.

2. RESEARCH METHODS

2.1. Participants

This article presents the findings of a qualitative study that collected narratives from seventy-eight undergraduate students enrolled in a medium-sized university in Kyiv, Ukraine. Potential participants received no advance indication of what the study might be intended to measure; they were simply told that the study was about educational video games. Students volunteered to participate in the study in exchange for additional course credits. One hundred and seven students took part in this research. Due to the study design, thirty respondents were eliminated because their answers did not add value to this research (e.g., incomplete answers, repeated answers, short yes/no answers, etc.). The final sample size was seventy-eight undergraduate students.

To analyse the composition of the study group, basic demographic information was collected, namely sex, age, and previous experience playing video games and with a social or political message. The mean age of the sampled participants was 17.05 years ($SD = 0.88$). Most students were male (73%), while the rest (27%) were female. The participants were 100% Ukrainian. Furthermore, participants indicated no prior experience with educational video games or games that explicitly address political or social issues. It is worth noting that the participants invited for this study had a primarily academic focus in technology-related fields and had no background in political, social, or cultural sciences. Lastly, looking at the frequency with which the students sampled played computer games, 23% identified themselves as casual players, 52% as gamers, and 25% as non-gamers.

2.2. Stimuli

Against All Odds (UNHCR, 2006) is an approximately 45-minute-long role-playing game developed by the United Nations High Commissioner for Refugees (UNHCR) to make people more aware of the problems and challenges facing refugees, to change the public's attitude towards refugees by illustrating the complexity and dangers of the refugee experience. It covers the refugee experience, from when people are forced to leave their countries of origin to starting their new life abroad. The players take on the role of a refugee and play through three modules with four stages each (Picture 1). The game's first module takes the player through questioning and persecution and then through the process of fleeing their city and, eventually, their country. The second module takes the player through the asylum request process, and the final module deals with the integration challenges facing the refugee in their new country. In addition to the information that the player gets while playing the game, they can also read the facts on the Web. The game module links to pages with background information about the Geneva Convention and facts on migrants, refugees, and asylum from external sources, such as NGOs. At the end of the game, the player is presented with ways to take action by either donating or spreading the word. The game is a free Adobe Flash video web-based with no special software or hardware required. Moreover, the game was awarded the Austrian State Prize for Multimedia and e-Business. It was praised for '*building understanding, empathy, and concern for the plight of refugees in the player.*' It is available in eleven languages.



Picture 1. Screenshot of the video game entry page.

Researchers have expressed interest in this game. For example, the game was used to study the impact on knowledge about refugees, perspective on learning, immersion, identification willingness to help and feeling of persuasion [18], [19]. Similarly, Sou [20] used the game to discuss procedural rhetoric concerning the problematic decisions and dilemmas facing refugees and to analyse the representational practices of serious games that focus on refugees.

2.3. Design and Procedure

This case-based study employed a narrative research methodology to collect the participants' experiences engaged in gameplay [21]. Narrative research makes it possible to explore the participants' experiences in nuances and interrelationships among aspects of experience and then present the meanings that participants derive from their experiences [21].

Students were given writing prompts in Microsoft Office 365 Forms with instructions to write down notable in-game experiences and observations after starting the game. Students were expected to spend around 45-60 minutes playing the game during one weekend. The participants kept an online reflective journal with prompts to assist them during or after gameplay in their reflections on their engagement, enjoyment, immersion, difficulties, personal reactions, learning outcomes, and links to the real world. To avoid communication barriers, students could choose to answer the questions in either English or Ukrainian.

The participants in the studies were treated with the following ethical standards:

- voluntary informed consent,
- the right to withdraw at any stage,
- privacy (data collected during the research process were treated with confidentiality to protect the privacy of research participants).

2.4. Data Analysis

The data analysis procedure was based on the repeated reading and reflection of the narratives and subjective judgments represented by the self-reports. The data was examined for patterns or repeated ideas that resulted in the data coding system. The responses of each participant were tagged with codes in a spreadsheet. The themes were manually coded on hard-copy prints, following a streamlined codes-to-theory model for qualitative inquiry [22]. The resulting coding themes accounted for the specific context of the selected video game. As stated

previously, this study intended to make players reflect upon their acquisition of new knowledge, changes in attitude brought about by the game, the experience of an event in the game, and linking this gaming experience to their real-life personal reactions combined with emotions and thoughts. Their self-reflections on those reactions cumulatively contributed to six overarching themes that were identified from the data, namely:

- Uncovering the true extent of the refugee crisis.
- Increased cognitive empathy for refugees.
- Increased level of self-awareness.
- Demonstration of willingness to take action in real life.
- Simplicity of linking video game themes with actual world circumstances.
- Impression from the video game.

3. THE RESULTS AND DISCUSSION

3.1. Uncovering the true extent of the refugee crisis

Extensive research findings indicate that a substantial portion of the population holds significant misperceptions regarding the global migrant population and its composition, and public perceptions concerning the impacts of migration often deviate from actual realities [23]. It is important to note that the current global landscape is marked by the presence of thirty-two active armed conflicts with varying degrees of severity [1]. A noteworthy observation arising from this study is that a considerable number of participants exhibited limited awareness of the extensive scale of the problem prior to engaging with the game:

'Some moments of the game seemed very informative to me, and I could immerse myself in the lives of real refugees.'

'The problem the game highlights, and even the fact of its coverage, is impressive because many of us do not thoroughly imagine the tragedy that is going on in the world.'

An interesting finding from the study is the self-perceived level of knowledge among certain participants, who initially believed themselves to be well-informed about the topic. However, upon further exploration, these individuals came to realise that their understanding of the issue was, in fact, limited:

'I learned more about refugees, and now I realise that I do not know anything about them and their lives.'

'I had not thought that immigrants have such serious problems; now I am convinced that they do have them.'

3.2. Increased cognitive empathy for refugees

The power of video games to engage players' ability to empathise innovatively was discussed by various researchers, demonstrating that these effects may be measurable [15], [24], [25]. Meanwhile, study participants stated that they understood the actual manifestation of stereotypes and prejudices, which confirms the previously reported change in attitudes toward the topics depicted in video games [26], [27].

'While playing the game, I was surprised by people's attitude towards refugees and the stereotypes that these people believe in for some reason.'

Another notable observation is the participants' recognition of prevalent prejudices and stereotypes held by the local in-game population. This realisation came as a surprise to them, highlighting the existence of biases and misconceptions:

'There were moments when it was not comfortable to be in the refugee's place, but I understood that to fight against the new environment would be a mistake, even though discrimination is clearly expressed and very offensive.'

'I was shocked by the number of people who were aggressively opposed to refugees ... Almost no one believes me! Such a life is terrible!'

3.3. Increased level of self-awareness

The transgressive nature of the chosen game world and the actions the character has to take for survival serves as a catalyst for self-learning and self-disclosure. Through these experiences, participants are exposed to challenging situations that require them to navigate complex ethical choices. This exposure not only prompts reflection on their decisions in the game but also sparks introspection into their own values, beliefs, and behaviours [26]. As such, several participants in our study were surprised to discover previously unrecognised facets of their own personalities and characteristics:

'Since I did not have the right to make mistakes, I had to think one step ahead. After all, the decisions I made in the present played a role in the future. I happen to be a strategic thinker.'

'I faced the fact that I am very indecisive.'

'I realise that I am very trustful. I like to trust people. But in the game, I found myself in trouble when I believed strangers. I shouldn't have!'

During the course of the gameplay, some participants, upon confronting the challenging moral dilemmas presented, expressed a newfound unwillingness to be involved in the particular type of issue addressed in the video game:

'This game was brutal to me. I understand that the game is based on real-life cases, cases very similar to the situation that people from the east of Ukraine are in now. But I hope I never find myself in such a situation... Also, I was very scared by the scene where the police beat the main character because of his beliefs; it was terrible for me.'

Discussing different aspects of a player's moral engagement in the video game in general and game difficult decisions and dilemmas in video games about refugees, in particular, is an emerging trend in games studies [20], [28]. This study revealed that a significant number of participants encountered complex moral dilemmas that prompted deep contemplation of their real-life behaviour. These thought-provoking scenarios within the game encouraged players to question whether they would respond similarly in actual situations:

'During the interrogation in prison, it was necessary to fill out a questionnaire the way the government wanted. I couldn't pass the level because I told the truth. And then I realised that I had to lie to escape. I hate lying!'

'During the third stage, when it was necessary to choose a new way of life, there was no way that I would want to choose, so I had to make a decision that didn't coincide with who I am.'

'It was hard to choose between my interest and the interests of the whole group. I had to negotiate with myself.'

3.4. Demonstration of willingness to take action in real life

There is evidence that after playing video games that tackle pressing social problems, people were more likely to participate in social and civic movements in their real lives, such as raising money for charity or volunteering [9], [15]. In addition, players report a strong desire to obtain more information about problems, communicate with friends about the issues, or stimulate them to play the game [5]. One essential characteristic of educational video games is their potential to stimulate a proactive mindset, fostering a willingness among players to take action and make meaningful contributions, even if it is only spreading the word among others. *Against All Odds*, in line with this principle, incorporates numerous links to nongovernmental organisations (NGOs) that provide valuable information and actionable ideas for individuals interested in making a difference. Owing to this, a considerable number of participants expressed a desire to become more actively engaged in addressing refugee-related issues, reflecting the game's ability to inspire and motivate individuals to contribute in various ways:

'I began to think about this issue very much. Now I will learn more about this. Immediately after the game, I read a lot of information about it. I want to know how to help these people.'

'Now that I have been in the role of an asylum seeker in a foreign country, even if only virtually, I have become more sympathetic to the fate of forced refugees. I will develop a stronger interest in refugee issues, and if needed, I will find ways to help them.'

3.5. Simplicity of linking video game themes with real-world circumstances

Through the gameplay experience, participants were prompted to consider the intricate connections between the video game, their personal lives, and the broader context of their country. They were encouraged to explore potential solutions to the complex refugee crisis. Interestingly, a prevailing conclusion drawn by many participants was the absence of immediate remedies. Recognising the continuous existence of armed conflicts and life-threatening circumstances, many participants acknowledged that as long as such adversities persist, individuals will continue to seek safety by fleeing perilous environments. Some participants connected the game with the global refugee crisis. Still, the majority linked it to the situation in Ukraine¹, where the military conflict with Russia and the annexation of Crimea in 2014 has caused internal migration processes:

'In our country, there are a lot of refugees from the Donbas who, like in the game, had to overcome difficulties to safely cross the border of the DNR (the self-proclaimed Donetsk National Republic) and enter the peaceful territory controlled by Ukraine.'

'Due to the annexation of Crimea and the tragic situation in the Donbass, our country is forced to help the affected people. Our government has made great efforts to arrange their lives in the central and western parts of Ukraine.'

'There are many interregional refugees in my country due to military actions in the eastern part. People, and sometimes me, are very judgemental about them. But unfortunately, in fact, half of the refugees treat their new environment disrespectfully, thus creating the ground to be treated judgementally.'

¹ The research was conducted before the full-scale invasion of Russia on the territory of Ukraine on 24.02.2022.

3.6. Impression from the game

Most of the participants were gamers or casual gamers who said they were familiar with virtual gaming environments and their effects. Of course, for students used to modern "bells and whistles" games, an educational video game like *Against All Odds* may seem tedious. According to the developers, the game is aimed at teenagers, the age when people begin to develop ideas regarding refugees and similar issues. Some educational video games have a proven history of positively impacting respondents' knowledge and opinions about the political issues addressed in video games [5]. Although many participants admitted that they had never played games of this type, they were surprised by their existence and realism, confirming the results on the effects of educational video games on immersion and feelings of persuasion [18], [19]:

'First of all, it became clear that the world is not perfect, and most problems do not lie on the surface. Creating such games is a way of informing society and encouraging compassion for and understanding of displaced people.'

'Initially, the game did not impress me. But the more I played, the more I was surprised by the essence of the problem it emphasises.'

'While playing Against All Odds, it seemed to me that I was in danger and needed to flee. There was discrimination on the part of the students, on the scene at the school where I was a newcomer. I realised how difficult it is to understand something without knowing the language.'

Furthermore, participants shared profound emotional responses elicited by the game:

'I was tense during the game due to the prevailing atmosphere. It was exciting to go through the whole story, though.'

'I felt fear, horror, terrified. This game really worried me. I felt like a refugee, and it felt very creepy.'

'What are emotions? Well, tension, concentration, joy at the right actions, disgust at the negative statements of people unfamiliar with me who, on the other hand, do not know me.'

Lastly, the game evoked introspective and philosophical contemplations among a subset of players, prompting deep reflections on the depicted situations and their broader implications:

'Sometimes I did something wrong, and I would lose. I played again and again. I felt upset because I realised that in real life I would have died immediately.'

'During the first stage of the first escape from the city, the police officers discovered me. I felt frustrated and lost because here it was just a game, and I could try again, but in real life, I would not have been alive anymore.'

4. GENERAL DISCUSSION AND CONCLUSION

'Video games and refugee crises' might sound like a contradiction in terms. It is hard to imagine someone playing with this serious topic on the grounds that social issues and their solutions have complex parameters to codify and craft. Surprisingly, by creating virtual environments that simulate aspects of reality and introducing players to unfamiliar narratives, video games offer an unprecedented opportunity to raise awareness, foster empathy, and promote a deeper understanding of pressing social issues such as the plight of refugees. Video games offer a unique platform for individuals to engage with complex topics, enabling them to

perceive life from diverse perspectives and delve into the intricacies of refugee experiences. As a result, the transformative potential of video games to provide players with immersive, interactive experiences and facilitate empathetic connections is driving a growing interest of the research community in applying this medium to address pressing social, cultural and political concerns.

The current study followed this trend and invited participants to explore what it was like to be a refugee. It attempted to ascertain whether the immersive, all-embracing and interactive learning environment provided by the educational video game *Against All Odds* helps develop and enhance users' awareness of refugee issues, change their perspective, and drive them to take some form of positive action in real life. The virtual world of *Against All Odds* is constructed around certain viewpoints, expressing specific ideas and offering particular experiences surrounding refugee life. The participants played *Against All Odds* and filled in the reflective learning journal to share information on their engagement, enjoyment, difficulties, reflections on their personal reactions, and learning outcomes. Six promising themes were identified from the data that showed a self-reported increase in knowledge issues addressed in these games and a better understanding of the scale of the problem in the world, development of emotional connections and empathy to the in-game character, and self-learning among individuals who might initially lack interest in the topic. There is a clear demonstration that the educational video game does show extraordinary promise to challenge students' attitudes, show them other realities, help them look beyond entrenched perspectives, and possibly motivate them to be change leaders.

Indeed, research findings support the idea that worldviews are often taken for granted and left unquestioned until they are juxtaposed with other frames of interpretation [29]. Bringing about attitudinal change is difficult, but the figured words of *Against All Odds* challenged players' default perspectives on the world. Players usually use the pronoun 'I' when talking about video games. By using the pronoun 'I,' players emphasize their personal involvement, agency, and identification with the virtual character or avatar they control. This linguistic choice enhances the sense of presence, immersion, and ownership, reinforcing the player's connection to the game's narrative and actions, and resulting in a new level of empathy. Indeed, the study reported that participants found the game experience entertaining, and many ended up feeling more empathy for refugees. This also demonstrates that empathy is a skill—mentally putting oneself in a given situation—and, as such, it can be trained, e.g., with video games that encourage players to create new contexts depending on the game's storyline.

On the whole, findings that video games can challenge players' existing mindsets and attitudes towards the cultural other invite educators to take a closer look at video games and find new applications for them as possible tools in their teaching practice. Video games are powerful tools for creating and communicating common views of a problem. They allow users to try out different possible solutions in a safe environment and to draw their own conclusions about why and how they work. Thus, the player forms core beliefs about the issue. Likewise, games make it emotionally easy for players to, for instance, try different ideologies. In other words, gaining hands-on experience with differing worldviews is one of the things that games allow. Users can safely experiment on their computers. Since the cost of failure in the game is low - players can always restart the game, pass a level again, or try a new strategy- they risk nothing by trying new identities. This low cost of failure is in stark contrast to the real world, where it is socially terrifying to take action. Consequently, those who enjoy playing video games and are accustomed to this medium may find it appropriate to learn about serious social and political topics from the same favourite medium with which they spend hours playing. This could create a precedent for video games to overtake traditional media in their influence on social issues and could also have real-life effects [30].

Regarding willingness to help, if the audience enjoys the game experience and gameplay, this leads to increased interest in learning more about the game's issues and, consequently, actions in real life [5], [9]. A greater understanding of the topic subsequently stimulates action-taking [10]. This qualitative study did reveal that participants reported finding the games' features captivating and later said they were willing to take action in real life. It is worth noting that though the participants proclaimed a willingness to take action in real life and help refugees or change the situation somehow, this was hypothetical. Their actual behaviour may differ. The described observations call for more research. However, people who stated their intention to take action in real life are more likely to actually do it than those who did not indicate such an intention [31].

Limitations of the study and prospects for further research. It should be acknowledged that the overall promising findings of this investigation could be related to the novelty of using this technology to address such pressing issues. The participants in the study had no exposure to educational video games that conveyed explicit political or social messages. To ensure deeper learning, discussion of the game content, the player's background, and prior knowledge alongside guided reflection might also be needed. It is also worth mentioning that student participation was rewarded with additional course credits. As a result, the Hawthorne effect must be considered, where participants might modify their responses to comfort researchers. Because this study included a relatively small number of student participants, the applicability of the findings to other populations is limited. Sampling other population groups and using different settings would enrich further studies on the appropriateness of video games to raise awareness of social and political issues and challenge the worldview through this medium. More than that, the video game used in this study was designed as a simplified but dynamic scale model of a refugee reality. How social and political issues are represented in video games vary widely in terms of genre, gameplay mechanics and tone, making it difficult to make generalisations about the effectiveness of video games as a tool for raising awareness and promoting understanding of social and political issues. Choosing for experiments other types of video games would add to the knowledge of how different approaches to representation influence players' understanding of the issue at hand.

It should be mentioned that, considering the evolving dynamics of migration and forced displacement that the world is experiencing in 2023, several recommendations emerge from the results of the present study. To begin with, fostering greater collaboration among video game producers, educators, and organisations that work on the hardships or dilemmas surrounding forcibly displaced people can develop and implement more targeted and impactful educational video games that specifically address current challenges. This collaboration will ensure that educational video games reflect current contextual realities and accurately represent their perspectives and experiences, and will make it easier to incorporate real-world scenarios, policy dilemmas, and potential solutions within the game narratives. It is equally important to adhere to ethical guidelines in developing and implementing these games, respecting refugees' dignity, privacy, and rights while promoting inclusivity and avoiding perpetuating stereotypes or trivialising their experiences. Furthermore, adopting a multidisciplinary approach can deepen our understanding of the impact of video games on attitudes, behaviour, and social change within the current political and social crises. Therefore, collaboration between fields such as game design, education, psychology, sociology, and cultural studies can shed light on the complex interplay between video games and society. In addition, continuous evaluation and improvement of educational video games is also necessary to ensure their effectiveness. Collecting quantitative and qualitative data to assess the impact of these games on player knowledge, attitudes, and empathy for refugees can help refine the mechanics and narratives of the game. Last but not least, advocating for policy changes and raising awareness of the potential of educational video games among policymakers, educators, and relevant stakeholders

can promote their integration into formal and informal educational settings, fostering empathy, critical thinking, and awareness of the refugee crisis.

In summary, even though video games have long been considered entertainment-focused, the educational use of video games that address global issues is an intriguing topic that the scientific community still needs to reach a consensus on. In the recent decade, there have been a number of studies exploring whether video games have any role in making people live and feel remote situations and negotiate cultural and political spaces as actively engaged citizens. The results of the present qualitative study expand on previous studies and demonstrate that video games could be used to address serious social issues and increase ethical awareness of the refugee crisis, arouse emotions, make people see things from the point of view of refugees, change people's perceptions, make them interested in the topic, and encourage them to take action in real life. Undoubtedly, further research with a multidisciplinary approach is needed to draw more robust and coherent conclusions.

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ВИВЧЕННЯ ЖИТТЯ БІЖЕНЦІВ ЗА ДОПОМОГОЮ ОСВІТНІХ ВІДЕОІГР

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Анотація. Останніми роками науковці дійшли згоди стосовно того, що відеогри мають різnobічні характеристики, які виходять за межі їх традиційного сприйняття як простого джерела дозвілля і розваг. Інерсивна природа відеогор призвела до зростання інтересу до їх використання як платформи для участі в дискусіях на різноманітні теми, що можуть зацікавити широку аудиторію та мати значущий вплив. У поєднанні з відчуттям присутності та співпричетності, що дозволяє гравцям опинитися на місці персонажів, які борються з соціальними чи політичними проблемами, відеогри перетворюються на ефективний і доступний інструмент для навчання та залучення до вирішення нагальних культурних, соціальних і політичних питань. Нинішнє дослідження має на меті краще зрозуміти потенціал освітніх відеогор у вирішенні цих нагальних проблем, у даному випадку кризи біженців, викликати емпатію та підвищити обізнаність, розглядаючи проблему "за лаштунками" з аудиторією, яка спочатку не була зацікавлена в цій темі. У цьому якісному дослідження ($N=78$) використовувався нарративний метод дослідження вивчення експериментального партисипативного навчання з учасниками, які грали в освітню відеогру "Всупереч усьому",

розроблену УВКБ ООН. Ця гра із зануренням гравців у віртуальний досвід була створена з метою навчання кращого розуміння причин переміщення біженців, складнощів та небезпек, з якими вони стикаються. Результати дослідження показують, що відеогра може допомогти вирішити серйозні соціальні проблеми, створюючи спрощену, але все ж динамічну масштабну модель реального життя біженців. Учасники повідомили, що отриманий від гри досвід викликав та посилив інтерес до проблеми, емпатію до біженців та мотивацію допомагати людям, які цього потребують. Дослідження ілюструє, що відеогри, ставлячи гравців на місце персонажів, які переживають труднощі, можуть викликати більшу зацікавленість до вивчення цих тем, завдяки їх доступності та ігровому компоненту, заливати ширшу аудиторію, долучаючи неігроманів і людей, які раніше не цікавились цією темою. Результати дослідження мають спонукати освітян, дослідників і науковців освітньої галузі, ігрової індустрії, соціальних наук і культурології вивчати потенціал відеогор як можливого інструменту для заличення учнів до вирішення соціальних проблем, кращого їх розуміння та виховання емпатії. У статті також визначено декілька подальших перспективних напрямів майбутніх досліджень у цій сфері.

Ключові слова: відеогри; кризи біженців; вплив відеогор; ігрове навчання; освітні технології; неформальна освіта.



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Training of Prosocial Skills to Migrant Groups Through Serious Games

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ABSTRACT

Due to forced migration migrants, asylum seekers and refugees finding themselves in a new cultural environment and trying to build a new life, they need to feel affiliated, to achieve peer acceptance among natives and diverse migrant groups. Such affiliation needs can be achieved by tailored training interventions aiming to promote the development of prosocial skills of cultural diverse groups, as alternative actions to facilitate better migrants'/asylum seekers/refugees' integration into the host society. The scope of this survey is to study the short-term effects of a social skills and prosocial behaviour training for adult migrants, refugees or asylum seekers. The method is based on the theory of prosociality and explores the effectiveness of a prosocial game in the development of prosocial skills, which are considered important for the social and emotional wellbeing and smoother integration of migrant groups in the new host community. A pre-test-post-test design was used, assigning 110 migrant participants to either an experimental or a control group and comparing them on their prosocial skills as evaluated through the NADINE questionnaire. Those who played the game

significantly improved in their teamwork and interpersonal skills. Although further research should be made on the use of serious games in SEL in migrant adults, this study adds to the research literature, supporting the potential of a game-based SEL intervention for effectively assisting migrant groups develop their prosocial skills and facilitating their better integration into the host society.

Keywords: serious games, prosocial skills, migrant groups

INTRODUCTION

A. Prosociality and its role in migrants'/asylum seekers' & refugees' integration

It is widely reported that migrants, asylum seekers and refugees are faced with the difficulty of adapting to a new environment and culture in the host countries. They usually experience social exclusion with severe consequences on health and social, emotional and mental wellbeing, discrimination or bullying by their natives, mostly because of their diverse physical characteristics, origin and religious background, as well as low native language fluency. Racism and discrimination as well as negative public attitudes and low acceptance of multiculturalism by the native population are reported as significant barriers to social, cultural and civic integration for migrants/refugees, and especially for the newcomers, as the attitudes and perceptions of the recipient society and institutions play an important role often leading to hostility and marginalization towards migrant communities and impedes adaptation of multicultural [1].

A less researched area linked to personal well-being and social adjustment relates to prosocialness and its importance during adulthood, while it has also been reported that prosocial behaviour has prognostic value for individuals' personal and social adjustment [2], [3], [4]. The term "prosocial" was first introduced during the 1970s by social scientists as an opposite antonym to "antisocial", denoting helping and cooperative behaviour versus negativity and aggression [5]. Prosocial behaviour is defined as the ability of a person to act in ways that benefit others. There have been many efforts by researchers in psychology to provide a more formal definition of prosociality.

Prosocial behaviour is a social voluntary and spontaneous behaviour that "benefits other people than self or society as a whole", "such as helping others in need, sharing resources, donating, comforting, co-operating, displaying interest to others with responsibility and volunteering" [6], [7], [8], [9]. Prosociality is in itself a complex concept and is comprised of many core domains, which include empathy, compassion, social competence, emotional intelligence, trust, fairness, compassion, generosity and cooperation [10], [11]. Empathy which is the most associated emotional response with prosocial behaviour, involves both perspective-taking, as the ability to recognize and understand the feelings, different point of views and perspectives of others and empathic concern, that is the sympathy, compassion, and regard we feel for others [12], [13].

Closely related, the social competence, involving the availability and application of cognitive, emotional and psychomotor resources, denotes that individuals, in private or professional context, use social interaction skills in order to achieve acceptable compromises between social adaptation and their individual needs and goals. Consequently, prosociality involves advanced personal and interpersonal skills, including empathy and active concern for the rights, feelings,

and welfare of other people, self-regulation of one's behaviour, emotions, and thoughts, social competence, collaboration and communication skills, ability to deal with multi-level conflicts, conscientiousness, adaptability, reliability and trustworthiness.

It has been clearly documented that prosocialness is developed from infancy through late childhood and early adolescence, "arising from complex developmental and psychological processes, involving attentional and evaluative processes, moral reasoning, social competence, and self-regulatory capacities" [14], [15]. Also, it has been reported that while prosocial responding follows a quite universal pattern in infancy, it progresses according to individual differences in later childhood and adult life [5]. Furthermore, it is supported that prosocial behaviour in adulthood is of higher importance and social value, as it can be highly threatened by interpersonal experiences and personal values (e.g., competition and personal achievement or coping with authority in work environments or in multicultural contexts). On the other hand, adults are expected to be more in need of assistance and support by others in order to deal with everyday difficulties due to several factors, associated with aging, health problems, unexpected life incidents and traumatic experiences or social distancing and limited interpersonal contact, which increases the significance of adults' capacity to provide support to others, as well as to actively establish or maintain strong social relationships [2].

Especially, adults' prosocial behaviour, mainly demonstrated through social desirable actions (e.g., engaging in volunteer work) indicates improved mental wellbeing, related to lower levels of depression [16], [17], greater life satisfaction, higher self-esteem [18], [19] and having quality social relationships [20]. Research findings also suggest that prosocial behaviour is associated with increased resilience, decreased internalizing and externalizing problems (stress, anxiety, anger and delinquent behaviours) and improvement in anxiety as well depression symptoms among survivors of war and displacement, while baseline social support was not associated with improvement in depression or anxiety. Furthermore, it was revealed that social relatedness factors (e.g. social support and acculturation) are related to mental wellbeing, as well as resilience was also shown to play a significant role in the relationship between social relatedness and mental wellbeing [21]. Resilience, embedding the key elements of adjustment and adversity, refers to an individual's ability to overcome external events and circumstances that cause shock to the individual as well as negative effects of risk exposure, cope successfully with traumatic experiences, or avoid the negative trajectories associated with risks and display positive adaptation [22].

In addition, it has been grounded that prosocial behaviour is a significant indicator to identify if the individuals feel belongingness to society and follow the social norms of what constitutes a good action. Recent studies have also provided causal evidence for the relationship between cultural diversity, intercultural competence and prosociality. Considering the importance of transcultural skills in an increasingly globalized world and of empathy in social interaction, the transcultural perspective-taking (understanding of divergent cultural values) is highly required, as being the ability to understand multiple cultural perspectives, especially those different from one's own norms, values, and beliefs that can inform and motivate certain attitudes, feelings, and behaviours [23]. It has also been documented that people residing in more ethnically diverse countries, more racially diverse metropolitan areas, or in more racially diverse neighbourhoods, are more likely to express prosocial concepts in their everyday

communications and more willing to spontaneously offer help to individuals or strangers in need [24]. It has been also documented that migrants' engagement in volunteering and relevant prosocial activities lowers the hiring discrimination against them [25], [26], as well as facilitates intergroup prosociality, that is group members' benevolent behaviour, charitable giving, positive contact, allyship, and solidarity with others [27], [17] facilitating their overall social and labour market integration.

As far as the development of prosocial skills is concerned, there are several studies focusing mainly in children and adolescents, that show that Social Emotional Learning (SEL) interventions have significantly improved social skills, behavior, and interpersonal relationships [28]. Though, SEL is traditionally delivered in person by trained professionals which has several barriers, such as lack of trained providers, scheduling difficulties, and significant time commitments, which may prevent individuals from participating in SST [28], [24]. Furthermore, traditional training to migrant groups brings up further difficulties, such as need for translation and cultural adaptation of the training material, the presence of cultural mediators during the whole training program and furthermore, higher rates of drop-outs due to the long duration of the training. To help overcome the limitations of in-person SEL, a growing number of intervention developers are employing emerging technologies. Game-based platforms offer a cost-effective way to provide training in an accessible and engaging way [28]. To this context, it is supported that prosocial games, in which game characters help and support each other in nonviolent ways, should increase both short-term and long-term prosocial behaviours.

Playing a game can influence cognitions, feelings, and physiological arousal. Relevant research findings suggest that playing prosocial games tends to increase prosocial behaviour tendencies, and that prosocial tendencies tend to lead to selection of prosocial games [29]. Also, it is identified that group play skill interventions are highly useful and effective strategies for teaching prosocial skills and essential prerequisite to enhance successful social participation. Research on the effectiveness of social skills and prosocial behaviour training in adults' inmates from pre-test to post-test phase has showed significant improvement in social knowledge and social interaction, as well as decreased social anxiety and increased positive feelings in everyday social situations [30].

Due to forced migration migrants and refugees finding themselves in a new cultural environment and trying to build a new life, they need to feel affiliated, to achieve peer acceptance among natives and diverse migrant groups. Such affiliation needs can be achieved by prosocial or antisocial means, while it has been argued that immigrant youth may express aggressive behaviour or bullying others mainly because they want to feel affiliated with other aggressors or to be accepted by peers [31]. In this respect, tailored training interventions aiming to promote the development of prosocial skills of cultural diverse groups, in order to make them affiliated and accepted by others based on common goals or common successes in achievement situations, are highly recommended as alternative actions to facilitate better migrants'/asylum seekers/refugees' integration into the host society [31].

B. Digital educational games and game-based learning

At the apex of the information era, a wide range of innovative technologies has been established for the delivery of educational content. These technologies incorporate features and conveniences that make them more attractive to the learner than traditional education methods. A prominent example of such a technology that has met the increasing interest of research communities in recent years is digital educational games (DEGs). More specifically, DEGs target the education sector and have the potential of administering educational knowledge within an interactive, engaging, and immersive experience [32], [33]. In fact, game-based learning (GBL) has been the subject of several research studies recently [34], [35]. In order to realize knowledge development, GBL requires the definition of specific learning objectives that the player has to achieve in order to complete the game. A lot of scientific discussions exist on the distinction between learning objectives and game goals, explaining that the former consists of the knowledge or abilities that we want the player to learn, while the latter correspond to in-game tasks mandatory for completing the game. This implies that in some games, a learning objective is not the actual game goal, but a means to achieve it.

An innovative type of games that targets the player's social behaviour is prosocial games. The application of sociological theories to educational technology is not something new, e.g., Bourdieu's [36] theory of practice is an example of a sociological theory that can be adopted in educational technology research to move toward understanding the wider complexities of technology practice [37].

A prosocial game can be designed so that it can model one or more of pro-social concepts, such as trust, cooperation, teamwork, compassion, and empathy by defining a player's learning objective as the expression of the corresponding prosocial behaviour. Such a game can positively affect the formation of an individual's personality through non-violent, "prosocial" games, in which helping and caring for others will assist him/her in comprehending that trusting and exhibiting prosocial behaviours have long-term and well-grounded beneficial results.

Furthermore, it has been argued in multiple studies that serious games need to avoid the one-size-fits-all game design principle and provide personalization features to better suit the preferences of their players [38], [33], [39]. In order to satisfy these requirements for player-centric design, game adaptation mechanisms have started to be considered as an essential component of modern serious games. The algorithms behind these technologies have their roots in artificial intelligence research and their central assumption is that adapting game content to certain aspects of player characteristics can assist in learning specific types of skills [40].

Regarding the link between prosocial video game play and positive influences in social behaviour, scientific research appears to converge to a common consensus that supports this link [41] [42]. There is a causal impact of playing prosocial games on helpful behaviour [43], [9], and evidence that prosocial video game exposure increases helping behaviour and decreases aggression. Similarly, Jerabeck & Ferguson [42] have suggested that cooperatively playing violent video games decreases aggressive behaviour regardless of the depiction of violent content [44], [45]. Nevertheless, prosociality in video games has mainly been studied

with respect to modelling helpful behaviours [13], cooperation [44] and establishing empathic links [46], though the majority of games used in several studies incorporate these elements as a means of offering players, multi-player entertainment-oriented outings [47]. However, there is limited research involving specific games that target at teaching the prosocial skills, such as trust, teamwork, reliability, which are essential towards cooperation. Even if the results of those researches on prosocial digital games are mixed, but encouraging, it should be pointed out that they all focus on students and young adolescents [28] [48], while no research targets adults and even more migrant populations. In the remainder of this paper we will present the design methodology for engaging a serious game, which requires trust between players, into the training of prosocial skills in adult migrant groups.

C. Research objectives towards Social Skills and Prosocial Behaviour Training in Adult Migrant groups

A game-based learning methodology and Social Emotional Learning (SEL) was adopted in order to support the development of migrants/refugees/asylum seekers' prosocial skills. Social Emotional Learning (SEL) is the process through which children and adults understand and manage emotions and social interactions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships and finally, make responsible decisions.

SEL is a deeply ingrained part of the way youngsters and adults interact in formal and non-formal learning environments, enhancing individuals' capacity to integrate skills, attitudes, and behaviours, so as to deal effectively and ethically with daily tasks and challenges and promote intrapersonal, interpersonal, and cognitive competence. According to research findings, trainees participating in SEL programs showed improved social skills, an increased ability to manage stress and depression, and better attitudes about themselves and others [49], [50], [2], [51], [13], [52] [53], [54]. Based on Social Emotional Learning, the widely used CASEL approach (Collaborative for Academic, Social, and Emotional Learning) [55] provides a solid framework for training on social and emotional learning competencies.

In our research we applied CASEL framework through technologically-mediated learning using a game to engage the learner emotionally and collaboratively, supporting cognitive engagement (i.e., mental processing and metacognition), affective engagement (i.e., emotion processing and regulation) and behavioural engagement (i.e., gestures, embodied actions, and movement). It is supported that serious games can provide a very efficient means for skills acquisition, as they are usually defined in constrained environments that allow players to subliminally concentrate on the accomplishment of their task. Particularly, games that involve a group of players offer a dynamic approach for developing and refining fundamental life skills, facilitate learning from each other, as well as provide the opportunity to players to encourage and support each other, solve problems together, and share joys and disappointment.

The aim of our research was to test the impact of a prosocial game on prosocial skills of migrant groups and also to examine whether **gender and category of migration** moderated the impact of the game.

MATERIALS AND METHOD

A. Ethics Statement

All procedures performed in this study were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki Declaration and its later amendments. Informed consent was obtained from all individual participants prior to inclusion in the study.

B. Participants

In the study 110 persons took part, divided in two groups: intervention group (50%) and control group (50%). Six more participants were engaged in the beginning of the research, but they dropped out before the end of the research. Chi-squared tests revealed no significant differences between participants in the two different groups (experimental, control) regarding gender, age and educational level. Therefore, there were no significant demographic differences across the two groups.

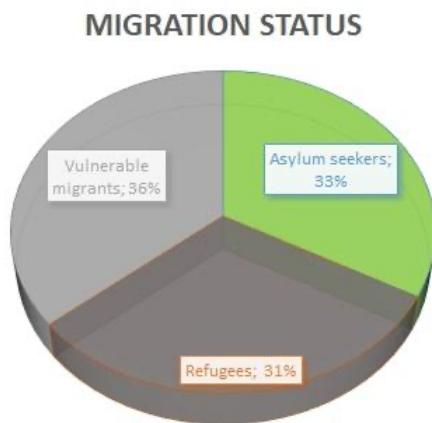


Figure 1: Participants' migration status

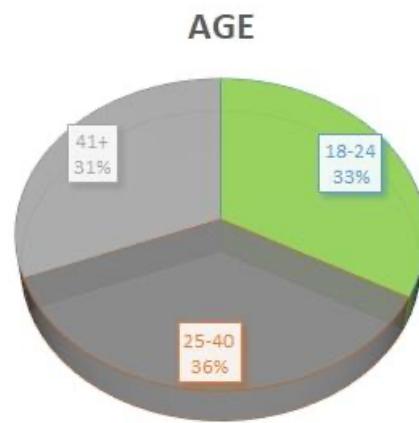


Figure 2: Participants' age

Regarding their status, 37% were vulnerable migrants, 33% asylum seekers and 31% refugees (figure 1). There was almost equal representation between men (51%) and women (49%), with 33% of them being 18-24 years old, 36% 25-40, and 31% 41+ years old (figure 2).

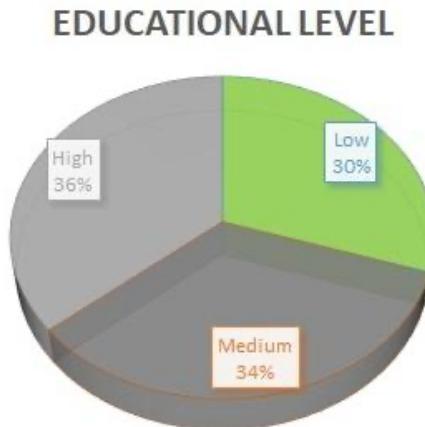


Figure 3: Participants' educational level

With respect to the educational level, 30% were of low level, 34% of medium and 36% of high level.

C. Path of Trust game

NADINE implemented in the research the Path of Trust (PoT), a two-player, cooperative, digital serious game, which is based on the gamification of the Prosocial Theory and Social Emotional Learning (SEL). PoT has been validated as a tool to teach the importance of expressing prosociality and understanding each other's needs and the benefits of cooperation as well as expressing trustworthiness [47], mainly targeting children at the ages of 7-10, who face danger of social exclusion.

PoT is an endless running game about two characters having to cooperate in order to collect treasures, while navigating through a maze inside an Egyptian tomb, avoiding mummies and other hazards in the process. The player who assumes the role of wandering around (henceforth referred to as the Muscle) is attributed with Sensory Deprivation while their partner, unable to directly determine the course of movement, uses a top-down map view to navigate both of them safely through the maze, without being caught (henceforth referred to as the Guide).

Guide gameplay: The Guide is presented with a top-down view of the common map in a 2D perspective (Figure 5). S/he can see up to three corridors ahead (left, forward, right, Fig. 5a) and can also see the contents of each corridor for a small period of time (Fig. 5b). This way the Guide knows in which corridor lies the Treasure, the Mummy or the portal and can provide guidance to the Muscle. The possible actions are mapped to a direction with 'left', 'right' and 'forward' beingg possible candidates (Fig 5c). The Guide gets notified when the Muscle is passing through a room containing treasure. Of course it is in the interest of the Guide to sometimes lead the Muscle intentionally towards a Portal in order to change roles [47].

Muscle gameplay: The Muscle is shown a 3D view of the tomb scene in third-person view (Figure 6). The player when s/he is inside the corridor can see the junctions and corridors, the two characters of the game and the items. Once the Guide chooses his command, a direction indicator is shown on the screen for a brief period of time (Fig. 6a). During this time window,

the Muscle player will be able to input his next move. When s/he chooses which direction to go (Fig. 6b), the characters will enter a corridor and have a limited room in which they can place their bodies in order to touch treasure points or avoid Mummies in a limited time frame (Fig. 6c).

Players are expected to work as a team and a sense of trust must be built between them in a way that will allow them to finish the game; the Muscle players must trust their partner to provide guidance towards treasure and away from danger and on the other hand, the Guide must place his/her trust in his/her partner to follow directions. As an end game condition, the game will end when any one of the players reaches a designated number of points, featuring also a time limit and a set of different endings to players to reach according to their performance. The game also features personalisation and adaptation capabilities, to maintain a high level of the players' engagement. The algorithms behind these technologies have their roots in artificial intelligence research and their central assumption is that adapting game content to certain aspects of player characteristics can assist in learning specific types of skills [47].

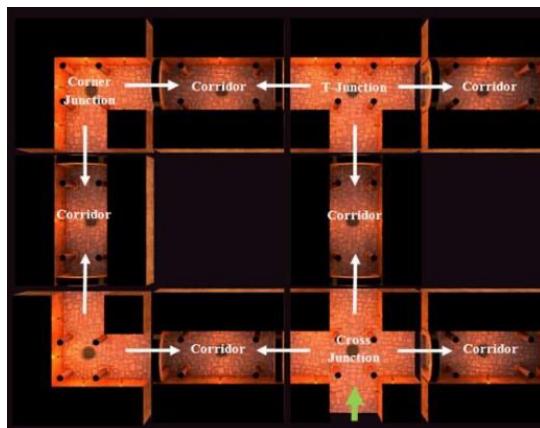


Figure 4: A map of the PoT

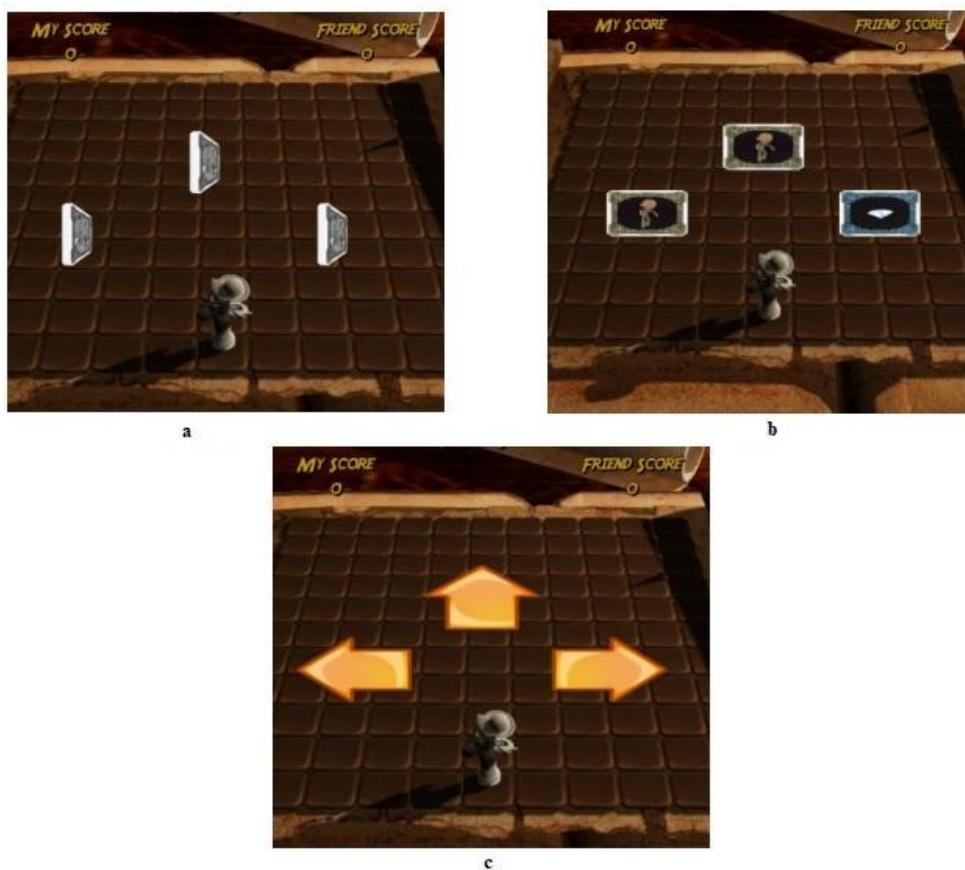


Figure 5: Guide Player Game Loop

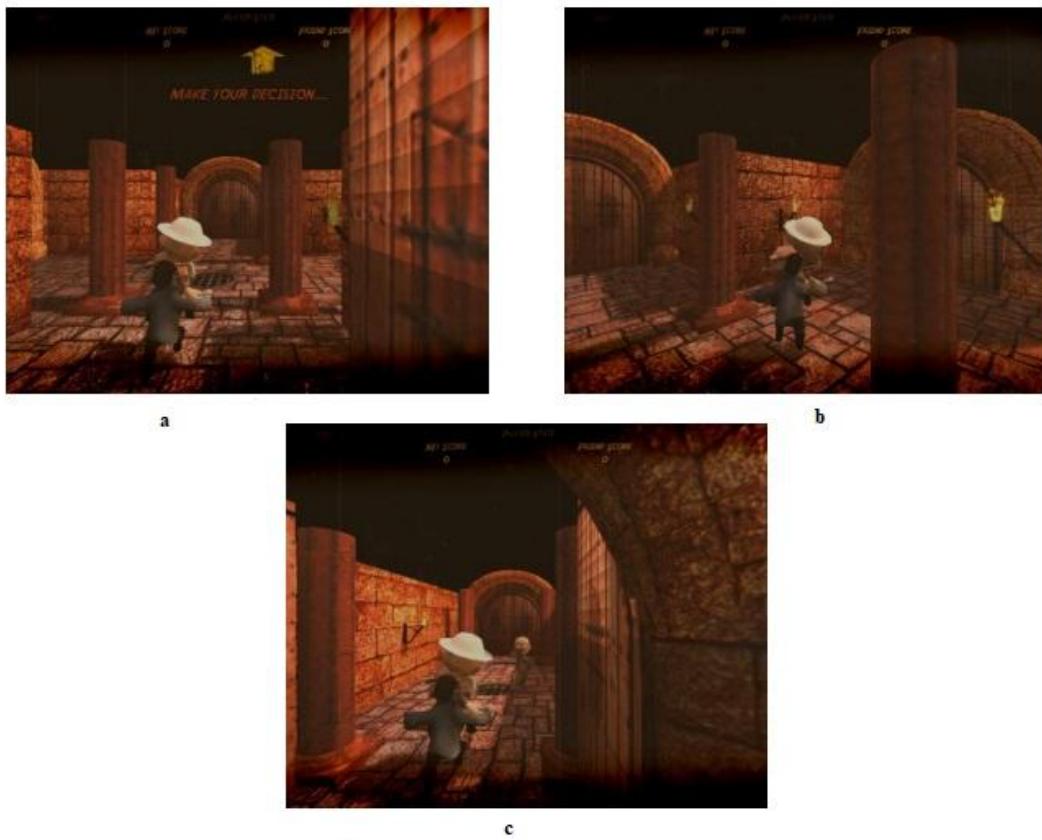


Figure 6: Muscle Player Game Loop

In the context of NADINE research, the PoT game was introduced and evaluated as a tool to train adult migrants/asylum seekers and refugees, which face high risk of exclusion and marginalization, towards the improvement of personal and interpersonal skills related to helping behaviour and empathy, collaboration and team-working, social interaction and communication skills, self-regulation, conscientiousness, adaptability, reliability and trustworthiness. The collaborative game, served as a tool to train players from diverse cultures skills such as reliability, collaboration, empathy, adaptability or emotional state [56], [57], enabling the interpretation of experiences or perspectives in intercultural context from more than one worldview [20].

D. Instruments

For the assessment of prosocial skills of migrant groups, the personal and interpersonal scales and subscales of NADINE soft skills questionnaire were used. The NADINE soft-skills questionnaire was developed within the NADINE project itself, in order to assess the soft skills of vulnerable migrants, refugees and asylum seekers. The NADINE Skill Tests' scope is to facilitate the production of concrete and realistic profiling results on the specific soft skills of each vulnerable migrant/ refugee/asylum seeker. Regarding the construct definitions of the soft skills, the constructs' operationalization was based on thorough literature review and focus groups with employers and migrant groups. European and national frameworks on skills were used, such as ESCO skills classification, OECD competency frameworks, definitions and descriptions used at the Survey of Adult Skills [58], the OECD Learning Framework 2030 [59],

[60], [61], the ILO competency standards [62], [63], the EU Key Competencies Framework [64], the EU Skills Profile Tool for Third Country Nationals [65], as well as international surveys and studies on skills needed to enable migrants labour market integration in the host countries (e.g. [66], [67], [68] etc.). The questionnaire was culturally adapted [69] and standardised by the working team.

Participants were asked to state the level of his/her agreement towards several statements describing specific behaviours in different situations using a 5-likert scale, where 1= disagree, 2= slightly agree, 3=Neutral, 4= slightly agree and 5= Agree.

Two scales of the NADINE Soft Skill Tests were used (interpersonal skills, personal skills), which provide scores for 6 sub-scales as well. The tests were found to have good psychometric properties. Their internal consistency reliability coefficients were above 0.70, while construct validity was established via factor analyses.

More analytically, the scales that were used are:

- Interpersonal skills (22 items): Teamwork: (5 items), Extraversion (5 items), Social interaction (4 items) & Conscientiousness (5 items) (item examples: "I believe it is always better to cooperate with others rather than to compete with them", "I find it enjoyable to team up with others and help them" etc.)
- Personal skills (11 items): Adaptability (2 items), Reliability (3 items), Emotion management (3 items) (item examples: "I tend to feel uneasy when things change around me", "I can manage to control the way I react, even when I am emotionally tense", "I do not usually lose my patience" etc.)

E. Research design

The participants in the research were recruited in cooperation with NADINE pilot partners by providing information to potential end users regarding the training, guaranteeing anonymity and confidentiality, and asking them to participate on a voluntary basis.

A pre-test-post-test design was used, assigning 110 migrant participants to either an experimental or a control group. The participants were divided into 3 sub-groups according to their migration status, i.e. refugees, asylum seekers and vulnerable migrants. Table 1 presents the research design.

Table 1: Pretest-Posttest Control Group Design: Effects of “Path of Trust” Game on pro-social skills

Subjects	Random Assignment	Pretest measures	Intervention	Posttest measures
Asylum seekers, refugees or vulnerable migrants	Group A (Control group)	NADINE Soft Skill Tests	No intervention	NADINE Soft Skill Tests
	Group B (Experimental group)	NADINE Soft Skill Tests	“Path of Trust” Game	NADINE Soft Skill Tests

The control group is consisted of participants who didn't take part in the training that is they didn't play the PoT game, while the experimental group participants played the game systematically for at least 4 weeks.

Testing occurred in April, May and June 2021 in Greece. All the participants in both the control and experimental groups were assessed at least 1 month prior to the training using the NADINE skill assessment questionnaires (personal and interpersonal skills' scales). All the participants went through the NADINE questionnaire online on an individual basis, taking support from a facilitator with whom they were communicating through an online platform. Detailed and common instructions on the administration of the questionnaire were provided to all participants before starting completing it.

The participants in the experimental group were then guided to play the game for a period of one month. A short demo of the game with a brief description of its story and the mission of participants were shown to them before playing. It was specifically pointed out that the game's mission was for both players "to collect as many precious stones as possible" in a limited period of time and that the best way to achieve this goal was to collaborate and trust their partners. Although they could decide on their own for how long to play, participants were asked to play with the game at least 5 days per week for 5-10 minutes.

Facilitators were also supporting the process when the participants were asking for it and checking whether the process was running smoothly.

The outcome of the training, namely the effects of playing the prosocial game on adult migrants' social skills and prosocial behaviour were assessed at the end of the 4-weeks experimental duration using the same NADINE skill assessment questionnaires (test-retest method) to all participants.

RESULTS

To establish internal validity, random numbers were used to assign participants into the control or the experimental group. Furthermore, we ensured that both groups were equal in terms of gender (men/women) and migrant status (asylum seekers/ refugees/ migrants) representation. Since participants were randomly assigned to each, any group differences should be attributed to chance. However, to ensure equivalency between the two groups we proceeded to test their comparability on various demographic variables (age, family status, level of education) finding no difference. Moreover, we examined whether the two groups had significant differences in the NADINE Soft Skill Tests prior to the intervention. To determine whether we will use parametric or non-parametric tests we investigated whether the underlying one-dimensional probability distributions of the two groups differ. The use of the two-sample Kolmogorov-Smirnov test showed no difference. T tests were used to determine whether the two groups differed in soft skills prior of the intervention and no significant difference was found as well.

Paired-samples t-tests were conducted to compare the scores on Soft Skills before and after the intervention for both groups (control and experimental). As expected for the control group there was no significant differences found before and after the intervention. For the

experimental group there was a significant difference in the scores of the "Team Work" sub-scale before the intervention ($M=19.58$, $S.D.=4.93$) and after the intervention ($M=20.24$, $S.D.=4.71$) [$t(54)=-4.31$, $p<.001$]. Moreover, there was a significant increase in the score of the combined scale "Interpersonal Skills" after the intervention ($M=105.66$, $S.D.=11.17$) than before the intervention ($M=105.10$, $S.D.=11.18$) [$t(54)=-3.65$, $p<.001$]. No differences in the other scale and sub-scales were found. The results of the paired-samples t-tests are presented in table 2.

Table 2: Paired-samples t-tests for the scores on Soft Skills before and after the intervention for the experimental group

Variables	Condition	Mean	S.D.	t	df	sig
Social interaction	Before	15.47	3.67	-1.42	54	.16
	After	15.50	3.61			
Team Work	Before	19.58	4.93	-4.31	54	.000
	After	20.24	4.74			
Extraversion	Before	18.71	4.80	-5.74	54	.57
	After	18.73	4.83			
Interpersonal Skills (combined scale)	Before	105.10	11.43	-3.65	54	.001
	After	105.65	11.18			
Reliability	Before	12.51	2.81	-1.63	54	.11
	After	12.62	2.74			
Adaptability	Before	7.20	2.15	.000	54	1.00
	After	7.20	2.11			
Emotional Management	Before	10.16	3.71	-1.00	54	.32
	After	10.18	3.69			
Personal Skills (combined scale)	Before	41.82	6.56	-0.44	54	.66
	After	41.84	6.60			

Furthermore, we examined whether gender differentiated the aforementioned results. Wilcoxon signed-rank tests showed that the intervention elicited a statistically significant change in "Team Work" score and "Interpersonal Skills" score for both men and women participants of the experimental group. For men the results were $Z = -2.85$, $p<.01$ (Team Work) and $Z=-2.39$, $p<.05$ (Interpersonal Skills). For women the results were $Z = -2.39$, $p<.05$ (Team Work) and $Z=-2.22$, $p<.05$ (Interpersonal Skills). No other differences in soft skill scores were found. Table 3 presents the descriptive statistics for "Team Work" and "Interpersonal Skills" per gender.

Table 3: Descriptive statistics of "Team Work" and "Interpersonal Skills" for men and women of the experimental group before and after the intervention

(sub) Scales	Gender	Condition	Mean	S.D.	Median
Team Work	Men	Before	18.78	5.13	20.00
		After	19.43	5.09	21.00
	Women	Before	20.40	4.66	21.00
		After	21.08	4.21	22.00
Interpersonal Skills	Men	Before	102.42	10.19	102.00
		After	102.89	10.13	102.50
	Women	Before	108.00	12.12	108.00
		After	108.52	11.67	108.50

Finally, we examined whether migration status (asylum seeker, refugee or vulnerable migrant) differentiated the results of the intervention's effectiveness. Wilcoxon signed-rank tests showed that the intervention elicited a statistically significant change in "Team Work" score for all migrant groups (asylum seekers: $Z = -1.93$, $p < .05$; refugees: $Z = -2.04$, $p < .05$, and vulnerable migrants: $Z = -2.54$, $p < .05$). They, also, showed a significant change in "Interpersonal Skills" for the "vulnerable migrants" ($Z = -2.23$, $p < .05$). The statistical significance in "Interpersonal Skills" for the other two migration status groups was $0.05 < p < 0.10$. No other differences in soft skill scores were found. Table 4 presents the descriptive statistics for "Team Work" and "Interpersonal Skills" per migration status.

Table 4: Descriptive statistics of "Team Work" and "Interpersonal Skills" for asylum seekers, refugees and vulnerable migrants of the experimental group before and after the intervention

(sub) Scales	Gender	Condition	Mean	S.D.	Median
Team Work	Asylum seekers	Before	21.05	4.34	22.00
		After	21.50	4.19	22.50
	Refugees	Before	19.47	6.04	22.00
		After	20.00	5.74	22.50
Interpersonal Skills	Vulnerable Migrants	Before	18.35	4.21	18.50
	Migrants	After	19.30	4.15	20.50
	Asylum seekers	Before	104.77	9.80	103.50
		After	105.06	9.84	103.50
	Refugees	Before	105.00	14.24	101.00
		After	105.53	14.07	105.00
	Vulnerable Migrants	Before	105.65	10.65	103.50
		After	106.30	10.03	104.00

CONCLUSIONS AND DISCUSSION

As it has been pointed out, tailored training interventions aiming to promote the development of prosocial skills of cultural diverse groups can function as an alternative action towards better migrants'/asylum seekers/refugees' integration into the host society, as prosocial skills, such as teamwork, trustworthiness, emotion management etc. lead to increase of the feeling of belongingness to society and social conformity. The scope of this survey was to study the effectiveness of a serious game on adult migrant groups' prosocial behaviour. The results of our study demonstrated the potential of the game as a tool for teaching important prosocial behaviour to vulnerable migrants, asylum seekers and refugees. Participants, who played the PoT, significantly improved in their interpersonal skills and mainly the skill to collaborate with others, whereas those who did not participate in the training intervention showed essentially no change in these skills. These results were expected given that the Path of Trust directly targets teamwork in order to achieve the goal. The same results occurred regarding gender and migration status variables. Both women and men increased their teamwork and interpersonal skills after the intervention. All migrant groups got improved on the teamwork skill, while regarding interpersonal skills vulnerable migrants had significantly higher scores after the intervention, whereas refugees and asylum seekers showed a tendency of improvement. On the other hand, no significant difference by treatment condition was found for the Personal skills (adaptability, trustworthiness, stress management) and the Communication and Extraversion. These findings may be attributed to the duration of the study, which was too brief (4-5 weeks) to impact migrant groups' skills. Furthermore, skills such as communication,

trustworthiness, adaptability, communication and stress management may take more time and real-world experience to alter than possible with this study design.

Especially for trustworthiness, the PoT could be enriched by engaging real-time adaptation mechanisms designed to give feedback to the player according to their choices, in order to guide them towards actions based on trustworthiness, by replacing for example items inside Corridor tiles as a response to player choices, followed by praise or corrective feedback. Players could be rewarded with Treasure Points whenever they trust the Guide's instructions, or, in case of a cynical approach, they could be reminded via text, or audio message that distrust should be reconsidered, or complementary switching a potential reward item with an enemy.

To sum up, despite the brief intervention period, our results provided initial support for the efficacy of the Path of Trust game for increased teamwork and interpersonal skills to asylum seekers, refugees and vulnerable migrants and in consequence they add in the growing literature, indicating that serious games can effectively be used for training purposes and effectively address a wide range of social and behavioural issues. Though, further research is needed, engaging a larger sample size for a longer intervention period in order to test whether personal skills, communication and extraversion can be affected by PoT and to validate the strong potential of a serious prosocial game in teaching prosocial behaviour to adult migrants, refugees and asylum seekers.

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24. **A systematic literature**
25. **review of ‘empathy’ and**
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35. **ABSTRACT**
36.

37. *Scholarship on the intersection of games and empathy is limited. However, over the*
38. *past decade peer-reviewed articles have started to be published in this area. This*
39. *study investigates this emerging scholarship on empathy and games to understand*
40. *how researchers are describing, defining and communicating their work. For exam-*
41. *ple, How are research articles about games defining empathy? From which disci-*
42. *ples are the researchers framing their studies? Which types of games are being*
43. *used in the investigations? Forty-nine articles were found, coded and analysed by*
44. *searching six different databases. For this investigation, each article was analysed*
45. *based on the discipline, keyword(s) used to find the article, definition(s) of empa-*
46. *thy used, types of games used in the article and the themes used in the article.*
47. *Articles emerged from twelve different disciplines and described over thirteen*
48. *different types of empathy. Findings were shared, as well as recommendations for*
49. *researchers studying this area.*

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KEYWORDS

games
empathy
gaming
digital games
literature review
compassion

INTRODUCTION

'Empathy' is not a new concept; however, it is being practiced in new contexts and applied in differing ways, which require further analysis (Brown 2018; Sousa and Tomlinson 2017; Tomlinson and Murphy 2018). For instance, some games are being purposefully designed and used to support prosocial behaviours and social and emotional learning (SEL), which may include enhancing empathy, compassion and related skills and concepts (Schrier and Farber 2019). Researchers like Ruberg have noted that game scholars and journalists have increasingly started to use the rhetoric of 'empathy' in relation to games, such as when describing ones that help players 'walk in another's shoes' (Ruberg 2020).

The intersection of games and empathy is an emerging area, starting to be studied over the past decade by researcher communities from all different fields, such as computer science, media studies, and the social sciences. However, they may not be in dialogue with each other, and there is no meta-level discussion of what or how it is being studied. Further, the term 'empathy' may be used very differently in different contexts, and without precision, nuance or even accuracy (Hall and Schwartz 2018). The use of the term may even be misused, which could have ethical and discriminatory implications (Ruberg 2020). This article seeks to contribute to this conversation by conducting a systematic review of peer-reviewed scholarship that use the terms empathy and games, and analysing how these terms are used.

~~The intersection of games and empathy is an emerging area of inquiry.~~ There are a number of reasons why this new area is important to study, and further define. One, people are spending more time playing games (Entertainment Software Association 2019), and this has increased even further during the COVID-19 Pandemic (Schrier 2021). When playing any game, players may experience prosocial interactions, such as friend-making and mentorship, as well as antisocial interactions, such as harassment and bullying through online games (ADL 2019; ADL 2020). Understanding how to encourage people to practice empathy towards other players can better support further prosocial interactions, and reduce the antisocial ones. For instance, practicing empathy through games may help to reduce conflict and aggression towards others, including bullying (de Vos et al. 2013).

Second, games may be another type of experience, alongside others, including film, books and theatre, which help us understand more about ourselves, others and humanity (Schrier 2019), as well as support the practice of social and emotional skills and behaviours. For example, Bréjard et al. (2016) observed that those who self-report frequent game play as being more adept at regulating their emotions than those who report occasional play.

Third, because games may connect people from all over the world, or may represent different types of people, cultures, and/or perspectives, games may help players see others as more familiar and as part of their 'in-group', rather than an 'out-group', possibly enhancing empathy (Darvasi 2016; Farber and Schrier 2017). Understanding the mechanisms by which we can connect with others through experiences such as games can help to possibly reduce biases and support cultural awareness and understanding (Schrier 2019).

Finally, games are civic communities and public spheres (Schrier 2021). They are places where we practice ethical and civic decisions and learn about how we can engage with the world. They even may more directly pose moral choices, or enable the practice of ethics. Developing empathy through games

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1. may be useful for moral and civic education, as they may support the practice
2. of ethics, alongside caring for others (Noddings 2010; Read 2019).
3. Thus, in this article, we seek to review the intersection among two fields
4. of research: games and empathy. This intersection has been explored in a
5. number of recent articles and books (Sampat 2017; Farber and Schrier 2017;
6. Darvasi 2016; Schrier 2021), though it is still understudied. The area of empa-
7. thy and games has been not well defined and there has been no systematic
8. review of recent scholarship.
9. As such, we aim to explore the scholarship in this area, describe the dis-
10. ciplinary approaches, identify their definitions, and recommend next steps. We
11. specifically want to understand the following:
- 12.
13. • What are the types (definitions) of empathy that are discussed in research
14. (peer-reviewed and scholarly) on games and empathy?
15. • What are the disciplinary approaches that are used?
16. • What are the themes that emerge in the articles on games and empathy?
17. • What types of games are they using?
- 18.
19. We hope that this investigation will serve as an initial map to this emerging
20. area and will help us to explore new questions within it, as well as help us in
21. refining our usage of empathy as applied to games.
- 22.

23. *What is empathy and why study it?*

24. What is empathy? Colloquially speaking, empathy is feeling how someone
 25. else feels or understanding what someone else has experienced (Gaesser
 26. 2013). Affective, cognitive and motivational components of empathy have
 27. been cited and debated (Gerdes et al. 2011; Bailenson 2018; Batson 1991; Zaki
 28. 2017).

29. There are a number of reasons why it is useful to study empathy. Researchers
 30. have connected empathy to prosocial behaviour, or behaviours that aim to
 31. help others and connect people (Gaesser 2013). Batson (1991) hypothesized
 32. that empathetic concern for an others' plight could lead to more altruistic,
 33. prosocial outcomes. Empathy and perspective-taking are key components of
 34. the Collaborative for Academic, Social, and Emotional Learning's (CASEL)
 35. Framework (Core SEL Competencies 2019), which describes the types of skills
 36. needed for SEL understanding. Empathy has also been seen as an integral
 37. component to moral education (Read 2019); to reducing conflict and bully-
 38. ing in educational settings and beyond (de Vos et al. 2013); and to developing
 39. a strong teacher-student relationship (Tomlinson and Murphy 2018). Finally,
 40. empathy may be related to reducing biases and enhancing respect for other
 41. cultures (Schrier 2019).

42. While some researchers have called for the need to teach empathy
 43. in schools and the workplace (Brown 2018; Sousa and Tomlinson 2017;
 44. Tomlinson and Murphy 2018), other researchers have criticized empathy as
 45. not being a useful concept, inconsistently applied, and that its use may even
 46. be problematic or harmful (Bloom 2017; Ruberg 2020; Hall and Schwartz
 47. 2018). Researchers have suggested that the societal value of being empa-
 48. thy compared to other social emotional traits (e.g. compassion) may in fact
 49. be overstated (e.g. Bloom 2017; Marinova et al. 2018), as compassion often
 50. includes action, such as being nurturing, whereas empathy does not. Being
 51. empathetic can cause some people to become biased towards in-groups over
 52. out-groups (Bloom 2017; Field 2017).

Empathy and digital games

Games can be defined as 'a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome' (Salen and Zimmerman 2003: 80). The boundaries of what a game is or is not – whether a walking simulator, VR experience, live-action role-playing game (LARP), or board game – is not the focus of this article. We included research on games and empathy based on what the researchers themselves defined as 'games' (by using the word, 'games', in our search).

An overriding research question is whether digital games can support the practice of empathy, and related skills and behaviours, such as perspective-taking, empathic concern, and prosocial behaviour. Related questions posited by researchers include: whether a game can spur participants to practice empathy outside of the game, similarly to within the game; whether empathy practice can lead to prosocial attitudes and behaviours; and whether designing games, as well as playing them, can support the practice of empathy-related skills, like thinking about views or evidence from another's perspective (Schrier and Farber 2019). For example, research has considered whether games can stimulate imagination and episodic memory in ways that may induce empathy (Addis and Schacter 2008; Gaesser 2013; Szpunar and Schacter 2012). Research has also considered whether some games can mentally transport players into fictional worlds (Gerrig 1993; Gerrig and Prentice 1991; Green and Brock 2000; Murphy et al. 2011), and whether this immersion also requires a strong narrative context (Bowman 2010; Cragoe 2016). Research has also investigated how players who are immersed in a fictional world may feel empathetic towards experience as a whole, as well as with virtual characters that populate the worlds (Schrier 2017; Belman and Flanagan 2010; Greitemeyer and Osswald 2010; Flanagan and Nissenbaum 2014; Mahood and Hanus 2017). For instance, in some digital games, players navigate a digital on-screen persona, projecting their identity onto an avatar. The extent to which players can perspective-take using a projective identity onto a digital avatar, choice-making as another persona, may (or may not) evoke feelings of empathy (Belman and Flanagan 2010). Players may also feel empathy towards nonplayable (computer-controlled) characters, as well as other players, in online multiplayer game worlds (Greitemeyer et al. 2010; Harth 2017; Ibister 2016; Lepron et al. 2015; Mahood and Hanus 2017; Turkle 2011). Researchers have also explored whether the interactions in game worlds can support (or limit) the practice of empathy-building skills, as well as ethics and morality (e.g. Schrier 2021; Schrier 2015; Belman and Flanagan 2010; MacLagan 2003; Noddings 2010). Finally, researchers have also considered the ethical implications of using games for empathy, and have noted instances where games may backfire, and spur misconceptions or even harm (Ruberg 2020; Schrier 2021).

Why conduct a systematic literature review on empathy and games?

The application of empathy to gaming is a new area of study. As this area continues to be studied, we argue that it is a useful moment to understand how researchers are investigating it – thus motivating this investigation. There are two main reasons that justify our pursuits in describing the research in this nascent area.

First, empathy itself is an 'umbrella term' (Zaki 2017: 60), and can have different nuanced meanings, based on the context in which it is used. In the

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Need a space

1. field of service design, empathy can mean the imagined potential experience
 2. of a client or customer or patient (Hess and Fila 2016), while historical empathy
 3. purports to engage people in the reconstruction of 'others' beliefs, values
 4. and goals, any or all of which are not necessarily those of the historical investigator' (Riley 1998: 33). As we discuss later, a number of different types of
 5. empathy have been identified and described by researchers. Cognitive empathy
 6. describes 'intentionally taking another person's point of view' (Belman and
 7. Flanagan 2010: 6), and affective empathy defines empathy as connected to
 8. emotions and feeling what others feel (Oswald 1996). Being able to appropriately
 9. define empathy will help us to better understand it in relation to gaming,
 10. will help to resolve any inconsistencies, will help to further establish this area
 11. of inquiry, and will help to better foster dialogue across researchers.
 12.

13. Second, empathy is a complex concept that is challenging to measure
 14. and assess, and the methodologies used to assess it may vary across different
 15. fields. Researchers have pointed to investigating specific skills, actions, behaviours,
 16. attitudes and practices, such as perspective-taking, empathic concern,
 17. personal distress, and fantasy involvement (Davis 1983), as well as the ability
 18. to express, identify and regulate one's emotions (Batson 1991; Baron-Cohen
 19. and Wheelwright 2004). For example, the ability to take on other perspectives
 20. may be fundamental to being an empathetic person, as it describes those
 21. who: (1) see the world as others see it, (2) are non-judgmental, (3) understand
 22. another's feelings (4) and can communicate this understanding (Wiseman
 23. 1996: 1165). Being able to appropriately measure and assess it will help us to
 24. accurately understand how games may (or may not) support the development
 25. of empathy, and will further define and refine this new area.

26. Current research on empathy often asks more questions than answers
 27. them. Thus, an impetus for this study is also to review the current research
 28. that exists around empathy, particularly in relation to games and gaming, and
 29. to identify gaps and themes, and to describe and further define its terms and
 30. metrics.

31.

32. **METHODOLOGY**

33. In this section, we describe the methodology for conducting the systematic
 34. literature review of published peer-reviewed research on empathy and games.
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36.

37. ***Use of a systematic literature review***



38. Systematic literature reviews are form of standalone research review here
 39. constructs such as search terms and databases are predetermined by
 40. researcher(s) (Adroher et al. 2018; Fink 2019; Okoli 2015). Similar to other
 41. forms of literature reviews, researcher(s) take the following steps: (1) decide
 42. upon research questions, (2) develop an agreed-upon review protocol,
 43. (3) search literature databases, (4) rescreen for inclusion of all search terms,
 44. (5) assess quality of search results, (6) extract data, (7) analyse and synthesize
 45. data and finally (8) report the findings (Xiao and Watson 2019: 102). Systematic
 46. literature reviews have methodological roots in the health sciences (e.g. Okoli
 47. 2015), but increasingly this approach is also conducted in other fields such
 48. as information sciences, learning sciences, and in game-based learning (Fink
 49. 2019; Hainey et al. 2016; Papamitsiou and Economides 2014). For instance,
 50. Hainey et al. (2016) conducted an extensive systematic literature review on
 51. game-based learning in primary education over a thirteen-year period. In this
 52.

review, Hainey et al. (2016) sought to understand efficacy through analysis and synthesis of empirical evidence of outcomes found in literature. As with Boyle et al. (2016) and Connolly et al. (2012), we hypothesized that search terms 'empathy' and 'games' may be used differently in different contexts depending of fields of study (empathy may mean something different in an historic-set educational game than in a nursing student training game). Unlike Boyle et al. (2016) and Connolly et al. (2012), we agreed upon the use of Boolean logic, which enabled us to combine search terms (i.e. search: 'empathy and games' rather than each term on its own).

Databases searched

We used a systematic literature review in which we searched and reviewed literature with specific keywords using inclusion and exclusion criteria, and relevant databases (see, for instance, Androher et al. 2018; Noyes et al. 2020). To conduct our review and analysis of relevant literature, we looked at six different major databases, ACM Digital Library, ProQuest, Academic Search Elite (EBSCO), Google Scholar, Sage and DOAJ, during March and April of 2018. We chose these databases as they were available through our libraries and have been previously used to conduct literature reviews related to the intersection of gaming and games with SEL (Schrier 2015). Systematic literature reviews can use a sample of databases rather than being exhaustive of all databases that exist (Okoli 2015; Xiao and Watson 2019).

Search terms and inclusion criteria

Using these databases, we systematically searched for all relevant studies and scholarly research literature using the following search terms: empathy AND games and empathy AND videogames. We used the following criteria to find the set of articles: (1) published in the previous ten and a half years from our search start date (2) appeared in scholarly, peer-reviewed journals or proceedings and (3) were related to videogames and empathy as a primary focus of the study, rather than just having those two words appearing in the article, as determined in part by the 'relevance' of being in the first 100 search results and by a review of the article by the reviewers (e.g. an article with the idiom 'blame game' in the title may fit the search criteria but is not relevant to the area of inquiry). Our search took place during Winter 2018; we set the publication date criteria to begin on July 2007 and to go up through December 2017, as 2007 and 2008 are when studies on empathy and games started to appear more frequently. Our search using these criteria resulted in 49 total articles (see Appendix 1 for a list of all the articles).

Coding strategies and interrater reliability

We coded 49 articles on six different categories: (1) discipline(s) of the article, (2) the database used to find the article, (3) keyword(s) used to find the article (Empathy AND games or Empathy AND videogames), (4) types and definition(s) of empathy used, (5) types of games used or researched and (6) whether fifteen specific terms or phrases were used in the article (in other words, whether the exact term or phrase was found in the article). Other categories were coded but were not included in this particular article. The discipline areas were defined based on both a top-down and bottom-up approach. We first looked at the common groupings of disciplines, based on the list of

1. subject guides in an institution's (anonymized) database. Then, we also looked
 2. at the fields typically represented in the study of games, and how these disci-
 3. plines are grouped (Coavoux et al. 2016). Finally, we looked at the tags and
 4. keywords in the articles we found to narrow down the list of fields we used
 5. to categorize. We omitted any disciplines that were not represented in the
 6. articles.

7. To elicit the codes we used and create a coding scheme (including the list
 8. of fifteen themes), we first reviewed 10 per cent of the articles and generated
 9. codes using an inductive thematic analysis (Corbin and Strauss 2014). A list of
 10. possible codes was generated from the key terms and phrases that emerged
 11. from an inductive, qualitative approach, conducted done by the research-
 12. ers, which involved *in vivo* (labelling significant words) and thematic coding
 13. (Saldana 2015) of the articles. Overlapping and similar codes were omitted or
 14. revised. After the researchers individually created a set of possible codes, they
 15. collaboratively compared the codes, refining the list iteratively. The researchers
 16. coded an additional 10 per cent of the articles and then compared the codes
 17. used, further refining the coding scheme.

18. Finally, the researchers coded all of the remaining articles. Individually,
 19. they first achieved 89 per cent agreement for the codes in the six categories.
 20. They then re-reviewed all of the articles together until they achieved 100 per
 21. cent agreement on the codes used. The full coding scheme can be viewed in
 22. Appendix 2. The list of 49 articles can be viewed in Appendix 1.

23.

24. ***Methodological limitations***

25. Systematic literature reviews are not intended to be exhaustive, but rather
 26. snapshots of empirical research in a specified field of study (Xiao and Watson
 27. 2019). As with literature reviews in general, there are always limitations such
 28. as search terms used, time windows for searches, and databases selected. In
 29. our review, we omitted any article that was (1) not peer-reviewed, (2) was only
 30. an abstract (and not a full article) or (3) was not in English, due to our inabil-
 31. ity to otherwise read and interpret the article. We also selected databases that
 32. were available through our university libraries, and have been previously used
 33. to conduct literature reviews related to the areas of inquiry (e.g. Boyle et al.
 34. 2016; Connolly et al. 2012; Hainey et al. 2016). These are all limitations to our
 35. study.

36.

37. **RESULTS AND ANALYSIS**

38. The total number of articles included in this study were 49 (N=49, or 49 cases).
 39. A full list of articles by database (including duplicates) is found in Table 1.

40.

41. ***Disciplines used***

42. Disciplinary approaches used in each article were also coded. Overall, the
 43. most frequently coded discipline was psychology (including psychologi-
 44. cal effects; social; behavioural aspects of games) with 25 articles being coded
 45. as relating to this discipline, or 51 per cent of the total articles. Additionally,
 46. communication/media effects and education/learning were coded for thirteen
 47. different articles each. Table 2 shows the disciplines that were coded for the
 48. 49 articles. To decide which discipline(s) to ascribe to an article, we used the
 49. following methods. One, we looked at the key terms of the article and title of
 50. the article. Two, we looked at the journal, and what subjects it is categorized
 51.

52.

Database	N	Percent of cases	
ACM Digital Library	16	32.7	1.
ProQuest	16	32.7	2.
Sage	4	8.2	3.
EBSCO (Academic Elite)	17	34.7	4.
DOAJ	6	12.2	5.
Google Scholar	20	40.8	6.

Note: The total is greater than 49 because some articles show up in multiple databases.

Table 1: The number of articles that fit the criteria for this study, found in each database searched.

Discipline	N	Percent of cases with this	
Psychology	25	51	17.
Nursing/health	6	12.2	18.
Economics/social science	6	12.2	19.
Gaming/gaming studies	9	18.4	20.
Communication/media effects	13	26.5	21.
Design (HCI/user experience design)	10	20.4	22.
Philosophy/ethics	4	8.2	23.
Computer science	3	6.1	24.
Civics	4	8.2	25.
Art/performing arts	3	6.1	26.
Education/learning	13	26.9	27.
Humanities/media studies	5	10.2	28.

Note: The total is greater than 49 because some articles were coded as being multiple different disciplines.

Table 2: The number of articles coded with the twelve different disciplinary approaches.

under. Three, we looked at the text of the article, and which types of literature and methodologies were used and cited in the article. For instance, an article such as 'Determining reactive and proactive aggression and empathy levels of middle school students regarding their video game preferences', was coded as being from the disciplines: psychology, communications and education.

The wide range of disciplines represented in the 49 articles reflects the multidisciplinary nature of empathy and games, as well as their intersection. Many articles were coded with multiple disciplines, suggesting that research in this area may benefit from having researchers or approaches from multiple different disciplines. Some journals appeared more than once (Computers in Human Behaviour, PLoS One and Frontiers in Psychology).

1. However, there was a wide range of journal types and disciplines of journals
2. (for instance, journals and proceedings as diverse as the Theatre Journal and
3. the PervasiveHealth'17: Proceedings of the 11th EAI International Conference
4. on Pervasive Computing Technologies for Healthcare). This further suggests a
5. diversity of approaches, uses and contexts for empathy and games. The highest
6. frequency of articles, in sum, comes from the social science fields (e.g.
7. psychology, economics/social science, education/learning).

8.

9. Themes that emerged

- 10.
11. Fifteen different themes associated with research on empathy and games
12. were identified and coded by identifying the terms and phrases used in the
13. articles (see Table 3). In analysing the associated themes that were most
14. frequently used overall by all 49 articles, 'Feelings/emotional understanding/emotion/empathetic concern' was by far the most frequently discussed,
15. with 41 instances and 83.7 per cent of the articles including this theme. After
16. that, 'Perspective-taking/perspective/put self in other's shoes' showed up in
17. 75.5 per cent of the articles analysed. Other terms 'Narrative/storytelling',
18. 'Identification with others/relate to others', and 'Immersion/engagement'
19. showed up in almost half the articles. Less frequently coded were themes such
- 20.

21.

22. 23. Theme	24. N	25. Percent of cases with this
26. Reflection	9	18.4
27. Communication	11	22.4
28. Perspective-taking/perspective/put self in other's shoes	37	75.5
29. Prosocial	19	38.8
30. Critical thinking	3	6.1
31. Cultural awareness/global/cultural understanding	14	28.6
32. Agency	12	24.5
33. Narrative/storytelling	21	42.9
34. Feelings/emotional understanding/ emotion/empathetic concern	41	83.7
35. Civics/civic engagement	6	12.2
36. Identification with others/relate to others	23	46.9
37. Immersion/engagement	22	44.9
38. Violence/violent	15	30.6
39. Altruism	3	6.1
40. Ethics/values/fairness/justice	4	8.2

41. Note: Often, multiple different terms appeared in the same article.

42.

43. *Table 3: The fifteen themes that were coded, and how frequently they appeared in the
44. 49 articles analysed.*

45.

as those related to ethics and fairness; critical thinking; empathy as integral to altruism; or civics and civic engagement.

A common misperception is that research on games and empathy is focused more on the cognitive aspects of empathy rather than the more affective, feeling-focused ones (Pavliscak 2018). However, our research suggests that emotions, feelings and care were also investigated, as themes associated with emotion were frequently identified in the articles reviewed (83.7 per cent).

The themes that more frequently emerged in relation to empathy and games suggest how games are being used to elicit the practice of empathy. Many of the more frequently identified themes are ones related to skills that a player may perform through a game or behaviours that the game may help elicit (perspective-taking, communication, reflection, identification with others, concern for others), as well as game design principles that may connect to an immersive, engaging environment where empathy can be practiced (storytelling, engagement). Thus, these themes may suggest possible goals and design patterns for future empathy games (Björk and Holopainen 2005). Or, the themes may help us to further refine how and when we use the term empathy in relation to games. Do we need to use the term 'empathy', or could we instead use the more specific skill or behaviour we want to elicit, such as reflection or concern for others?

'Violence' was a frequently used term and was used in almost a third of the articles reviewed. However, the themes that emerged suggest that the research on this topic is not just related to the limitations of games (e.g. aggression, violence), but also on the beneficial aspects (e.g. to support perspective-taking, cultural awareness, feelings). This is important to note, as media reports often cite the antisocial aspects of games, rather than the prosocial aspects (Schrier 2019).

Finally, the lower frequency of the themes of equity and ethics among the data set we studied suggest a gap in the scholarship. We should be considering not only how games may be supporting prosocial change, but the ethics of that transformation. What are the equity-related and ethical implications of the use of empathy games? (Ruberg 2020; Rusch 2017; Rusch 2019; Schrier 2021).

Types of empathy

Many different types of empathy were described in the research articles analysed. Thirteen kinds of empathy emerged (see Table 4), including a general term for 'empathy'. Shin and Ahn (2013) describe cognitive empathy as a social behaviour that involves reading and interpreting the thoughts of others. Dodge (2011) describes cognitive empathy as including four different processes: 'perspective taking (understand another's point of view) and fantasy identification (imagining oneself in the place of another), as well as [...] empathy reflection (recollecting one's response) and empathy projection (hypothesizing response in another context)' (288). Edele et al. (2013) distinguish between cognitive and affective empathy, and explain that cognitive involves 'understanding what another person is thinking or feeling' and relates to actions like 'metalizing, perspective-taking, social cognition, mindreading or theory of mind'. Affective empathy focuses on experiencing or sharing another's feelings or emotional state, and relates to activities such as 'emotional contagion, affect matching, empathic concern' or sympathy (Edele et al. 2013).

Definitions	N	Percent of cases with this
Cognitive empathy	18	36.7
Emotional/affective empathy	19	38.
Psychological/psychoanalytic empathy	1	2
Reactive empathy	4	8.2
Global empathy	2	4.1
Other (auto, player-specific)	12	24.5
General empathy also (general term of empathy)	44	89.8
Parallel empathy	3	6.1
Fantasy empathy	1	2
Cultural empathy	3	6.1
Trait empathy	3	6.1
Game/gameplay empathy	2	4.1
Critical empathy	2	4.1

Note: The total is greater than 49 because some articles included more than one type of empathy in the research.

Table 4: *The types of empathy that were identified and/or defined in the articles.*

Edele et al. (2013) argue that these two types of empathy comprise both the cognitive and affective aspects. Cognitive empathy and affective empathy were used somewhat frequently, in about one-third of the cases. Likewise, these two types of empathy are often found together in the same article, with eighteen articles mentioning both cognitive and affective empathy. Overall, the most frequently used definition type was a general use of the word 'empathy', which was used in 89.8 per cent of the articles, rather than a specific type of empathy. Other types of empathy were used, though less frequently, such as reactive (8.2 per cent), parallel (6.1 per cent), and cultural empathy (6.1 per cent). Types of empathy that were coded as 'other types of empathy' included player-specific empathy and auto-empathy. Three additional types of empathy (historical empathy, motivational empathy, and literary empathy) were found in research outside the criteria for this study. Researchers may want to consider them in future research.

The use of so many different types of empathy-related terms suggests that there is little consistency across disciplines in how they are defining, applying and measuring empathy. This has implications for how empathy is operationalized in a game, or researched and measured through a game environment. Moreover, the majority of articles use the term 'empathy' in a general sense, rather than focus on a specific type of empathy, suggesting that many of the articles are using this complex concept as a stand-in for a number of skills, behaviours and practices, rather than using previously defined models, standards or measurements.

52.

Part of the reason for this may be because empathy itself has been under-studied, misunderstood and used differently depending on the context (Zaki 2017; Hall and Schwartz 2018). There is no empathy 'discipline', and, as discussed earlier, multiple disciplines may approach this concept differently, which then affects how it is further applied to games. The wide range of how empathy is used in the 49 articles, and the fact that there are so many different types of empathy that emerged in such a small sample, suggest the need for standardizing the definitions of the term 'empathy' and how it is measured and used. Researchers should consider whether it is empathy they are studying and whether there is another term, skills, behaviour, concept, or process that would be more relevant, precise or accurate.

Types of games

The type of game(s) that were described, researched and interpreted in the research articles were also coded (e.g. digital games, analogue games) (see Table 5). Digital games, generally, were the most frequently coded type of game used in the study (87.8 per cent of all articles include at least one digital game in their research). Commercial off-the-shelf (CoTS) games were also used frequently, with 44.9 per cent of the cases.

Around a quarter of all the articles included a game that was created by the researchers, and was used to conduct the research. For instance, Tong et al. (2017) researched a game *As If*, which aims to help players understand what it is like to have chronic pain and experience body limitations. This game was coded as being their own game, and a digital game. Likewise, Kors et al. (2016) researched *A Breath-taking Journey*, which is a mixed reality game that the researchers created, which helps to share the perspective of a refugee. This was coded as a digital game, as a game made by the researchers, and as a game for change.

We chose a maximum of three game categories that best described the games used in each of the articles. While some of the categories are not overlapping (analogue vs. digital game), many of the categories can be overlapping (CoTS game and digital game).

Game categories	N	Percent of cases with this
Commercial off-the-shelf (CoTS)	22	44.9
Educational game	8	16.3
Analog (non-digital) game	6	12.2
Games for change/social impact	16	32.7
Digital games	43	87.8
Role-playing games	4	8.2
Their own game used for testing	13	26.5
Economics/game theory game	5	10.2

Note: The total is greater than 49 because some articles included more than one type of game in their research, or the game was coded with multiple categories.

Table 5: The types of games used or researched in the articles.

Italicize this game

1. These results suggest that practicing empathy is not the domain of just
 2. one type of game (such as a game for social change or educational game) but
 3. that it may be part of the experience of many different types of games, includ-
 4. ing ones that are solely focused on entertainment. Participating in empathy is
 5. part of the human experience, and not just the domain of games intentionally
 6. created for prosocial goals.

7. The results also showed that about a quarter of the research included a
 8. researcher-created game. This suggests the interest on the part of research-
 9. ers to create games for empathy, the possible lack of models to use to answer
 10. research questions about empathy, and the need for supporting research
 11. in this field by funding both the creation of game experiences alongside
 12. the research of those experiences. However, an open question is why these
 13. researchers sought to label their game using the term 'empathy', rather than
 14. using other terms.

15.

16. **NEXT STEPS AND RECOMMENDATIONS**

17. This research describes and analyses scholarship around the intersection of
 18. empathy and games. This area is characterized by being diverse in terms of
 19. disciplines used to approach the topic, where this scholarship is found, and
 20. the ways in which empathy is used and defined in the articles.
 21.

22. Taking a step back, we start to see how the different disciplines approach
 23. the intersection of empathy and games. Not surprisingly, the disciplines
 24. from the social sciences (e.g. psychology, economics, civics, education) look
 25. at the affective and emotional aspects of games, as well as the cognitive
 26. aspects. The economics discipline more regularly created and used their own
 27. games to help better understand human behaviour, such as around altru-
 28. ism. However, it may be surprising that other disciplines, such as computer
 29. science and HCI, also considered the affective aspects of empathy. It suggests
 30. that researchers studying interactions among computers and human beings
 31. are not just thinking about technical and usability questions, but are also
 32. considering the affective aspects of these interactions. The humanistic
 33. pursuits – such as game studies, arts and media studies – have themes
 34. related to emotions, but also perspective-taking, narrative/storytelling,
 35. and identifying with others, suggesting that these disciplines consider games
 36. a type of text, where story, characters and other elements draw in a player,
 37. and help them to empathize with others, just as they might with good litera-
 38. ture or film.

39. Finally, certain disciplines were more likely to use certain types of games.

40. **E** As mentioned before, economics researchers used their own games, while
 41. nursing and HCI did as well, which suggests that these fields could bene-
 42. fit from vetted design frameworks, principles and patterns. We should also
 43. encourage other fields to develop their own games so that we can see the
 44. full range of what games can do, and not just limit their use to certain fields
 45. (such as testing for usability and human interactions as in the case of HCI,
 46. or addressing healthcare needs or nursing education). As suggested by this
 47. research, researchers from some fields have focused more on analysing others'
 48. digital and commercial games, such as those from computer science, psychol-
 49. ogy, philosophy and humanities. We may want to encourage these disci-
 50. plines to consider applying analyses to non-digital games, games for social
 51. change, and games for education. This will help to further the area of empa-
 52. thy and games, as it will benefit both from a consistent taxonomy of terms



and methodologies, as well as a diverse range of questions being asked and answered, and perspectives being applied (Zaki 2017).

We make the following recommendations for researchers.

Define and interpret how to use the term empathy

This study identified at least thirteen different 'types of empathy' in the literature. Rather than continuing to generate new definitions of empathy or new ways of describing empathy (e.g. affective empathy, critical empathy, motivational empathy), researchers should consider devising a shared set of standardized, clearly defined, specific and measurable terms. Researchers need a shared language and taxonomy to be able to build on each other's studies and replicate results. Researchers should continue to consider whether the term 'empathy' is the correct term to use, or whether there are other more precise or accurate terms (Hall and Schwartz 2018), such as allyship, civic engagement or cultural humility.

Establish norms around measurement and assessment

This study suggested that there are a number of different disciplinary approaches taken when studying empathy (twelve distinct disciplines emerged), each with their own standards, metrics and terminology. Rather than just finding novel ways to measure empathy, researchers should first consider how to establish norms and standards for assessing and comparing empathy across disciplinary boundaries, while also still encouraging a diversity of analyses from a variety of disciplinary approaches.

Partner or collaborate with researchers from other disciplines

This study has suggested that a wide range of disciplinary approaches are being used to study empathy and games. Given the complexity of empathy and games, researchers may want to connect with researchers from other fields. This will help to share best practices across fields while also enhancing multiple perspectives on the area.

Generate more research and games in this area

The area of empathy and games is still nascent and has few peer-reviewed journal articles published on the topic. Yet, many open questions remain (Schrier and Farber 2019). Researchers may want to explore themes associated with empathy and games (such as those fifteen themes identified in this study), with full consideration to the limits and benefits of games. In particular, some areas of empathy and games may be understudied, such as the ethics of empathy games, or critiques of using games to cultivate empathy (Ruberg 2020). Finally, we should encourage researchers to analyse and create the full range of gaming experiences, such as games that are non-digital or non-commercial. Currently, games are being more frequently created and analysed in the disciplines of HCI, nursing and economics. We should also encourage other disciplines to create games as part of their scholarship.

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Simulating Migration and Integration in Digital Games:

A Theoretical and Practical Exploration of Governmentality in an Audience Gaming Setting

MASTER THESIS

by

Rüdiger Brandis & Can Mert Bozkurt

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- 3.2 Multiplayer
- 3.3 Audience Gaming

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- 0.1 Migration and Digital Games
- 0.2 The Research on Migration in Digital Games

The rest of the theoretical part was written by Rüdiger Brandis.

Practical part

The general game design discussed in chapter 4 of the thesis was done in equal parts by both Rüdiger Brandis and Can Mert Bozkurt.

The “Prototype Manual and Game Design Document” was written by both authors with Rüdiger Brandis being responsible for the general descriptions and structure of the document and Can Mert Bozkurt describing the technical details of the design.

The prototype was developed by Can Mert Bozkurt.

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Introduction

0.1 Migration and Digital Games

According to the UN Refugee Agency, there were 70.8 million people forcibly displaced worldwide in 2018. These are the highest levels of displacement in absolute numbers on record.¹ In Europe and Germany, the so-called “migration crisis”² has led to the emergence of a new discourse about the treatment and administration of migrants. Game developers and researchers have also reacted. Especially in the context of serious and applied games, discussions arose about the possibilities of the ludic medium taking part in this discourse. These have, however, mainly focused on the physical journey many refugees have to undertake and less on the administrative processes they have to face in the target countries of their migration effort.

Digital games have a tendency to define themselves strongly through a suggested goal for the player. This leads to a preference of adventure settings and processes of travel. Although this is an integral part of the migration process, major decisions for the migrants’ lives and fate are being made within governmental structures and by the people executing state policies. Michel Foucault calls this “[...] ensemble formed by the institutions, procedures, analyses and reflections, the calculations and tactics that allow the exercise of this very specific albeit complex form of power [Governmentality], which has as its target population, as its principal form of knowledge political economy, and as its essential technical means apparatuses of security.”³

We propose that by building upon the analysis of this ensemble from a perspective of migration research, a simulation game system, which enables players to explore the concept of governmentality and migration can be created. As an example framework, we are using one of the most decisive places for a migrant: the foreigner’s or immigration office. It is here that abstract rules of power are translated into action. Of course this is not the only place where migration politics are being executed, but in the Federal Republic of Germany especially it is a

¹ Cf. UN Refugee Agency: “Refugee Statistics”, <https://www.unrefugees.org/refugee-facts/statistics/>, accessed on August 6, 2019.

² Cf. Park, Jeanne: “Europe’s Migration Crisis”, <https://www.cfr.org/backgrounder/europe-migration-crisis>, from September 23, 2015, accessed on September 02, 2019.

³ Foucault, Michel: “Governmentality”, in: Graham Burchell/Colin Gordon/Peter Miller (Eds.): *The Foucault Effect. Studies in Governmentality*, Chicago: The University of Chicago Press 1991, pp. 87-104, here p. 102.

very important institution for handling migrant affairs within national borders. Also, unlike refugee camps, localities of a very specific form of physical migration which is rather related to detention than it is to accommodation, the immigration office offers the possibility to thematize a variety of migration forms because everybody has to go through its application processes.

Furthermore, the controversial nature of the topic and the uneven distribution of power of the processes involved makes it necessary to break with the tradition of game design for multiplayer games, which tries to balance different actors to enable a fair gaming experience. Therefore, our design is targeted towards streamers and the active participation of their audience in the game session. An audience gaming setting is infused with a more complex power dynamic between streamer or performer and audience, which will force the streamer to accommodate their viewers during play or face their reactions. Public gameplay also gives way to an audience-dependent meta-game outside of the hard-coded core.

0.2 The Research on Migration in Digital Games

Three research areas are relevant for our research: (1) the research on migration in digital games; (2) migration theory, governmentality and integration politics; and (3) research done on the phenomena of streaming and related forms of game design, which we will refer to as audience gaming.

Topics of immigration and asylum have been used in many serious games and some conventional games. Games like AGAINST ALL ODDS (2005) by the UN Refugee Agency and MISSION US: CITY OF IMMIGRANTS (2015) funded by American National Endowment of the Humanities organization try to teach about the problems refugees and immigrants face before, during and after they emigrate. On the other hand, more conventional games such as THE WOLF AMONG Us (2013) by Telltale Games structure their storylines around such topics without emphasizing education or opinion forming. The persuasive nature of the aforementioned serious games and their educational effectiveness have been studied by many new media scholars whereas epistemological research is scarce due to lack of titles on these subjects.

Migration theory is mainly concerned with the reasons for why people migrate. Today's approaches range from neoclassical economics (push & pull systems) over migration networks

to perspectives informed by system theory.⁴ The research of governmentality and migration adds a postcolonial approach, which instead of analyzing migration as a purely goal-oriented venture, it focuses on the rationalities, technologies and subjectivities of power. Through this it is concerned with the change of governmentality through its confrontation with migration and integration politics.⁵

With the advent of broadband network infrastructures, video streaming services such as YouTube and Twitch.tv became the dominant source of multimedia consumption. As these platforms matured, the community and the culture gave birth to a new generation of providers, initially as commercial live feeds, later as adult entertainment and gaming streams. These live video streams allow the audience to interact directly with the performer and among themselves through chat widgets. Present research focuses on why people watch others play, their socio-cultural characteristics, and how they form communities and the performers' motivations and approaches.⁶ On the other hand, streaming platforms' newly developing affordances of interactivity such as straw polls, donation messages and stream-integrated games are not yet well researched.

0.3 Governmentality and Migration

Governmentality is a concept, which Michel Foucault first mentions in his lecture series "Security, Territory, Population" at the Collège de France in 1977 and 1978.⁷ Here, he describes three different aspects that define the term:

1. The ensemble formed by the institutions, procedures, analyses and reflections, the calculations and tactics that allow the exercise of this very specific albeit complex form of power, which has as its target

⁴ Brettell, Caroline B/Hollifield, James F. (Ed.): *Migration Theory. Talking across Disciplines*, New York: Routledge 2015.

⁵ Walter, William: "Reflections on Migration and Governmentality," in: *movements. Journal für kritische Migrations- und Grenzregimeforschung* 2015 1 (1), <https://movements-journal.org/issues/01.grenzregime/04.walters--migration.governmentality.html>, accessed on July 27, 2019.

⁶ Cf. for example: Kaytoue, Mehdi/Silva, Arlei/Cerf, Loïc/Meira Jr., Wagner/Raïssi, Chedy: "Watch me Playing, I am a Professional: a First Study on Video Game Live Streaming," in: *Proceedings of the 21st World Wide Web Conference, WWW 2012*, Lyon, France, April 16-20 (2012), pp. 1181-1188; Sjöblom, Max/Hamari, Juho: "Why do people watch others play video games? An empirical study on the motivations of Twitch users", in: *SSRN*, May 13, 2016, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2779543, accessed on July 27, 2019; Gandolfi, Enrico: "To watch or to play, it is in the game: The game culture on Twitch.tv among performers, plays and audiences", in: *Journal of Gaming & Virtual Worlds*, Volume 8 Number 1 (2016), pp. 63-82; Vosmeer, Mirjam/Ferri, Gabriele/Schouten, Ben/Rank, Stefan: "Changing Roles in Gaming: Twitch and new gaming audiences", in: *Proceedings of 1st International Joint Conference of DiGRA and FDG* (2016), http://www.digra.org/wp-content/uploads/digital-library/paper_101.pdf, accessed on July 28, 2019.

⁷ Foucault, Michel: *Security, Territory, Population. Lectures at the Collège de France 1977-1978*, New York/Basingstoke: Palgrave Macmillan 2009.

population, as its principal form of knowledge political economy, and as its essential technical means apparatuses of security.

2. The tendency which, over a long period and throughout the West, has steadily led towards the pre-eminence over all other forms (sovereignty, discipline, etc.) of this type of power which may be termed government, resulting, on the one hand, in the formation of a whole series of specific governmental apparatuses, and, on the other, in the development of a whole complex of savoirs.

3. The process, or rather the result of the process, through which the state of justice of the Middle Ages, transformed into the administrative state during the fifteenth and sixteenth centuries, gradually becomes 'governmentalized'.⁸

While the second and the third aspect illustrate on what historical narratives Foucault bases his theory, it is the first that is the most interesting for us. Here he describes the process of governing in a modern national state. The "institutions" can be not only the government itself or administrative state organizations, but also businesses and educational institutions like schools or universities. The "procedures, analyses [...], reflections, [...] calculations and tactics" are created, executed and changed by these institutions to enable the control of the state's population. To achieve this it has to use these institutions as "apparatuses of security" through the enactment of "political economy", which Foucault understands here in its original sense: "[...] to set up an economy at the level of the entire state, which means exercising towards its inhabitants, and the wealth and behavior of each and all, a form of surveillance and control as attentive as that of the head of a family over his household and his goods."⁹ This has to be understood as a constructive form of control that is needed to keep large numbers of people functioning and at best happy within a society. But it should not be confused with a moral form of justice, but rather as the government's means to an end to ensure the continuous existence and well-being of its population.

In the following section we analyze migration and integration in the context of governmentality. This means that we will focus on the interplay of different actors trying to deal with the state's "political economy" to control its population through its "apparatuses of security." While we strongly rely on this theoretical concept of government in our argumentation, it is not our intention to merely mirror it in our game design, but to use it as an abstract model to guide a design that enables critical reflections of the state institutions and procedures that channel immigration requests.

⁸ M. Foucault: Governmentality, pp. 102-103.

⁹ Ibid., p. 92.

0.4 Methodological Approach and the Structure of the Thesis

The project's methodical approach makes use of the discourse analysis introduced by Michel Foucault in the "The Order of Things"¹⁰ and "The Archaeology of Knowledge,"¹¹ in which he defines a discourse as a practice through which its content is formed. We will use this to analyze the most common and controversial junctions of the discourse on migration to gain the necessary knowledge to create an informed model for a game simulation. Additionally, a hermeneutical approach is applied to interpret the analysis' findings to adapt them into the exemplary context of the simulation.

The thesis' structure follows an empirical layout. At first we evaluate the research of migration and integration, which is followed by an introduction to the concept of audience gaming, before we use this information to create and discuss our own simulation game model. The first chapter "Migration, Integration and Government" gives an overview of common theories of migration and integration from the perspectives of economics, sociology and anthropology. Alongside, these models will be compared to existing digital games, which use similar models to simulate or tell stories of migration. The second chapter "Administrative Processes of Migration and Integration" analyzes formalized processes of integration, state administrations and discusses Foucault's concept of "apparatuses of security"¹² in the relationship of the state as a regulator of migration. For this, we focus mainly on the situation and regulations in Germany. The third chapter "From Singleplayer to Audience Spectacle" compares major forms of structural storytelling in games, from singleplayer stories to procedurality and classic multiplayer, before introducing the concept of audience gaming as a new form of play, which emerged on streaming platforms like Twitch.tv. Finally, we use this information in the last chapter "Simulating the Administration of Migration and Integration" to build a model for a digital game simulating migration allowing players to explore the relationship between migrant, public officer and the state's administration.

¹⁰ Cf. Foucault, Michel: *The Order of Things*, New York/London: Routledge 2005.

¹¹ Cf. Foucault, Michel: *The Archeology of Knowledge*, New York/London: Routledge 2004.

¹² Cf. Dilts, Andrew/Harcourt, Bernard, E.: "Discipline, Security, and Beyond: A Brief Introduction", in: *Carceral Notebooks* 4 (2008), p. 2.

1. Concepts of Migration and Integration

1.1 The Difference between Migration and Integration

Migration and Integration are processes which cannot be separated from each other, while both still indicating different aspects of the movement of people between regions. Tomas Hammer offers a fitting description by separating them into two political areas: “immigration policy” and “immigrant policy.” Immigration policy describes the regulation of crossing a border, together with considerations about the reason for the migration and the connected issuing of residency permits. Immigrant policy on the other hand deals with the integration of immigrants into the relevant social areas and functions of the host country.¹³ This understanding can be mirrored onto the terms of migration and integration, but in reality these two are not used consistently. In Germany for example, the so called “Migrationsdiskurs” is mainly concerned with issues of integration, indicating the term “migration” as an umbrella term which integration is merely a part of.¹⁴

Our work will examine an institution (the foreigner’s or immigration office), which is situated at the intersection of immigration and immigrant policy. Instead of discussing at length the different definitions of migration and integration, we will start with a general understanding of the terms, which is based on their definitions by the International Organization for Migration (IOM):

Migration - The movement of persons away from their place of usual residence, either across an international border or within a State.

Integration - The two-way process of mutual adaptation between migrants and the societies in which they live, whereby migrants are incorporated into the social, economic, cultural and political life of the receiving community. It entails a set of joint responsibilities for migrants and communities, and incorporates other related notions such as social inclusion and social cohesion.¹⁵

On this basis, the rest of the chapter will explore different aspects of migration and integration theories and policies. These aim less to define, but to explain the regulation, governing and rationalities of migration movements and policies.

¹³ Cf. Hammer, Tomas: “Introduction”, in: Tomas Hammer (Ed.), European immigration policy. A comparative study, Cambridge/London/New York: Cambridge University Press 1985, pp. 7-10.

¹⁴ Cf. Hoesch, Kirsten: *Migration und Integration. Eine Einführung*, Wiesbaden: Springer VS 2018, p. 14.

¹⁵ International Organization for Migration (IOM): “Key Migration Terms”, <https://www.iom.int/key-migration-terms>, accessed on July 28, 2019.

1.2 Economic Theories of Migration

It is not surprising that for an ancient, persistent and massive phenomenon like migration there are many attempts to explain the reasons for this continuous movement throughout human history. These theories of migration stem from different backgrounds and accordingly focus on different aspects. The most common and referenced approaches stem from the field of economics, which were for a long time (like economics in general) dominated by a neoclassical perspective, which focuses on analyzing markets by looking at the supply and demand of goods, outputs, and income distributions.¹⁶

The origins for this analysis of migration can be found back in the 19th century, when Ernest George Ravenstein evaluated the census reports of 1871 and 1881 in the United Kingdom and published his findings in “The laws of migration” in 1885. His research focused not only on international migration but also migration between counties and revealed that economic centers like London or Liverpool amounted for the highest numbers of migrants.¹⁷

Based on this, migration from the perspective of neoclassical economics is understood on a macro and micro level. In general, migration is seen as a result of an asynchronous supply and demand of labor force. Confronted with such a condition, individuals, who are focused on the maximization of income, will move towards an area where the demand for the labor they can offer is in high. George J. Borjas puts it like this:

The theory is based on the behavioral assumption that individuals migrate because it is in their benefit (either in terms of psychic satisfaction or income) to do so. Individual behavior, of course, is constrained by their wealth and by the existence of immigration policies that limit (or encourage) the entry of persons into particular geographic areas.¹⁸

One of the most important assumptions of neoclassical models is that every country will export those factors (goods, labor, etc.), of which it has the most, which will in the end balance out their value.¹⁹ It reveals the strong focus on a naturally arising form of balance between

¹⁶ Cf. King, John: “Ten propositions on ‘neoclassical economics’”, in: Jamie Morgan (Ed.), *What is Neoclassical Economics? Debating the origins, meaning and significance*, New York: Routledge 2016, pp. 168-179, here. pp. 179-180.

¹⁷ Cf. Ravenstein, Ernest George: “The laws of migration”, in: *Journal of the Royal Statistical Society* 48 (1885), pp. 167-277, here p. 173.

¹⁸ Borjas, George J.: “Economic Theory and International Migration”, in: *International Migration Review* 23/3 (1989), pp. 457-485, here p. 457.

¹⁹ Cf. Parnreiter, Christof: “Theorien und Forschungsansätze zu Migration”, in: Karl Husa/Christof Parnreiter/Irene Stacher (Eds.), *Internationale Migration. Die globale Herausforderung des 21. Jahrhunderts?*, Frankfurt a. M./Wien: Brandes & Apsel 2000, p. 25-52, here p. 28.

markets in neoclassical economics. For Borjas this assumption also applies to migration and the exchange of labor forces.²⁰

Neoclassical models of migration explain migration solely based on the rational economic reasoning of the individual, who reacts to the supply and demand of the labor market. Michael P. Todaro further expands this system so that the decision for migration is not just based on actual differences in income but rather on the comparison of the expected income if the individual would or wouldn't migrate.²¹ Further factors that might influence migration like following family or political asylum is generally not considered by these theories.

Looking at digital games, this perspective on migration through the lens of neoclassical economics is one of the most persistent and easy systems to adapt. It is solely focused on income maximization as the motivator for migration, something that can easily be expressed through a numerical simulation, which makes an implementation easy. Games like PHARAOH (1999) and ZEUS (2000) by Impressions Games illustrate how central this notion of economics and migration can be integrated in a game without even drawing too much attention to it.

Both games present players with the task to build and maintain a city, either in ancient Egypt (Pharaoh) or ancient Greece (Zeus). At the beginning, players only have empty land, its resources, and some money to start with. Workers are needed to build a city, so housing has to be provided. As soon as this is done, migrants start to arrive and populate the city. If players are successful in providing them with jobs, entertainment and consistent wealth, the city will continue to grow and people will be happy. But if the players do not provide enough of these things, people will soon leave the city again in search for a better life elsewhere. The very foundation of these games is modelled after the classic push and pull logic of neoclassical economics.

In contrast to theories based on neoclassical economics, the dual labor market hypothesis explains migration not based on the rationality of the migrants but rather those of the employers. "The massive migrations from underdeveloped to developed areas seem to be initiated by active recruitment on the part of employers in the developed region for labor to

²⁰ Cf. G. Borjas: *Economic Theory and International Migration*, p. 459.

²¹ Cf. Todaro, Michael P.: "Internal migration in developing countries: A survey", in: Richard A. Easterlin (Ed.), *Population and Economic Change in Developing Countries*, Chicago: University of Chicago Press 1980, pp. 361-401, here p. 377.

fill a quite specific set of jobs. Thus, it is the employers, not the workers, and the jobs, not the incomes, that are strategic.”²²

It is based on the hypothesis that markets in countries with industrial mass production are split in two sectors, the second sector being jobs characterized by high fluctuation (mostly bad working conditions and low wages). Thus they have a low social prestige and are generally avoided by natives. This creates a high demand for workers in the second sector, which especially attracts migrant workers as they see their stay in this country as temporary and are thus not as concerned with social status as natives are.²³

Similar to the neoclassical model, this theory is also not at all concerned with non-economic factors that might induce migration. Furthermore, it still shows a radical distinction between developed and undeveloped countries and is thus completely focused on the existence of independent nations. Transnational and global economic networks do not yet play a role here. It also shows that the dual labor market hypothesis is not that different from the neoclassical model: it merely shifts the focus from the rational individual that is the migrant to the employers.

Looking at digital games again and our previous example, ZEUS and PHARAOH, it could be argued that by building and maintaining an economy, the player acts as an employer. The act of creating houses thus would signify the need for workers and through the lack of native work it would induce migration. However, both games don't offer any distinction between different labor markets sectors. There are only workers. A better example would be the economic system of FROSTPUNK (2018), which distinguishes between two types of labor force: engineers and (unskilled) workers. Engineers are much rarer and are needed to perform specific tasks like medical care or research. Workers on the other hand are needed for the majority of tasks and players will have to regularly search for new ones to keep the city running. The two could therefore be seen as a representation of a two-sector labor force market. However, FROSTPUNK does not simulate the intricacies of social status, which are important for the dual labor market hypothesis.

What it does simulate however, although merely as a narrative sub-system, is the importance of family and relationships for the morale and motivation of citizens (engineers and workers). Early on in one of the campaigns a woman asks for example to accompany a

²² Piore, Michael J.: *Birds of Passage*, Cambridge/London/New York: Cambridge University Press 1979, p. 19.

²³ Cf. Ibid, pp. 43-45.

search party because she hopes to find family members among the refugees. The refugees are the source of new labor force for your city.

This focus on the family as a relevant factor in migration in games like FROSTPUNK is approached merely from an emotional standpoint, and thus aligns with newer economic approaches to migration which focus on the family as the driving force of migration. The “New Economics of Migration” developed by Oded Stark is based on research about migration from rural areas into cities in the so-called third world. The main differences to the aforementioned economic models of migration are that the new economics also consider factors like insecurity, relative impoverishment, risk mitigation and pooling of income.

[...] this approach shifts the focus of migration theory from individual independence (optimization against nature) to mutual interdependence (optimization against one another), that is, it views migration as a ‘calculated strategy’ and not as an act of desperation or boundless optimism.²⁴

Migration of single family members is not seen as the split or dissolution of the family, but rather a segmentation of risk into different physical markets. This is especially interesting because it takes into account cases of sending money back to the family, which might not only reside in a different area of the country but different countries all together. Looking at the German-Turkish labor migration of the 1960s and 1970s, this is especially relevant as this was originally seen as a temporary condition. A lot of workers not only from Turkey, but also Italy and Greece, saw their stay as a possibility to support their family at home.²⁵

While the aforementioned approaches focus on smaller units like the individual or the family, others approach migration from a global standpoint. They react to the world-systems theory’s approach, which focuses on a macro-scale analysis of world trade and interpret migration accordingly. This is a very diverse, multi-disciplinary field, but two aspects stand out in defining migration in a globalized economy.

First, migration is seen as a subsystem of the world market. Saskia Sassen calls it a “labor supply system”²⁶, which is needed to accommodate the expansive nature of the capitalist system and to lower labor costs. Second, national states as actors themselves are considered to be of major importance for the movements of migration as they call for, regulate and govern its flow. Sassen describes the role of national states as follows:

²⁴ Stark, Odek: “The New Economics of Labor Migration”, in: *The American Economic Review* Vol. 75 No. 2 (1985), pp. 173-178, here p. 175.

²⁵ Hunn, Karin: »Nächstes Jahr kehren wir zurück ...« *Die Geschichte der türkischen »Gastarbeiter« in der Bundesrepublik*, Göttingen: Wallstein Verlag 2004, p. 9-10.

²⁶ Sassen, Saskia: *The Mobility of Labor and Capital. A study in international investment and capital flow*, Cambridge: Cambridge University Press 1988, p. 31.

In fact, national boundaries do not act as barriers so much as mechanisms reproducing the system through the international division of labor. [...] While the generalization of the labor market emerging from the consolidation of the world capitalist economy creates the conditions for international migrations as a world-level labor-supply system, the strengthening of the nation-state creates the conditions for immigrant labor as a distinct category of a nation's labor supply. That is to say, immigrant labor is not just any labor. It is a component in the labor supply with a distinct role in the labor process characterized by: (1) the institutional differentiation of the processes of labor-force reproduction and maintenance; and (2) a particular form of powerlessness, associated with formal or attributed foreign status, that meets the requirements of types of work organization based on direct rather than structural control over the workforce.²⁷

Looking at digital games, grand strategy games like VICTORIA (2003) and government simulation games like DEMOCRACY (2005) are fitting comparisons for a world-system theory point of view, especially because of the sheer scope these games are trying to achieve. Instead of focusing on a specific city like PHARAOH, ZEUS or FROSTPUNK, these games model global conflicts. They can be militaristic, which most grand strategy games favor as an engaging way of play, but they also incorporate economics, geography and politics in general as factors that the player has to consider. STELLARIS (2016) also considers migration, which is simulated through both emigration and immigration and is based on factors like housing and unemployment rates. The player has the possibility to sign migration treaties to regulate migration and can also welcome refugees from other worlds. The players' territory can therefore be compared to the role of national states in migration as the Sassen described it.

1.3 Socio-Cultural Dimensions of Migration

While economic theories tend to focus on the origins of migration, anthropology and sociology put an emphasis on the continuous movement of migration and the new socio-cultural spaces that emerge through it. A typical instance of analysis are networks of migration, which arise around families, friends and acquaintances creating a link between the sending and receiving country or region.

Networks connect migrants and nonmigrants across time and space. Once begun, migration flows often become self-sustaining, reflecting the establishment of networks of information, assistance and obligations which develop between migrants in the host society and friends and relatives in the sending area. These networks link populations in origin and receiving countries and ensure that movements are not necessarily limited in time, unidirectional or permanent.²⁸

Existing networks also result in a constant flow of new information of the targeted region. They also lower the costs of migrating over time as not only the target countries

²⁷ Ibid., pp. 36-37.

²⁸ Boyd, Monica: "Family and Personal Networks in International Migration: Recent Developments and New Agendas", in: *International Migration Review* Vol. 23 No.3 (1989), pp. 638-670, here p. 641.

administrations are more prepared and the process more documented, but migrants already living there can provide things like a first place to stay and crucial social and cultural information about the target country. The accessibility of information rises extremely through migration networks and offers a twofold form of integration: A more guided introduction to the new living environment as well as a familiar setting to settle in. The second part especially makes migration easier in offering something familiar together with the new which also reduces the psychological stress of having to adapt to a new surrounding.²⁹

Networks of migration, with family being one of the most important cornerstones, promotes and supports the continuous flow of migration intensively. Most decisions of migration are based on previous migration efforts. "Movement generally occurs through well-defined contact networks."³⁰

Since the 1990s, these networks also have been increasingly analyzed in the context of globalization. In contrast to economic theories, international migration is not only seen as a result of globalization, but also as a factor that accelerates it and creates new transnational identities challenging traditional concepts of space and nationality. Migrants define home not only as one but rather as two or even more places. The differences between a simple cultural connection to the place of origin, for example in European communities in the USA up to the mid-20th century, and these transnational identities lay in easily accessible modes of transportation. Today, the possibility to maintain not only a correspondence with the place of origin, but to regularly travel back and forth, moves countries not only economically closer together, but also culturally. The results are new transnational social spheres and identities.³¹

These transnational migrants are connected to communities in both their place of origin as well as the region they immigrated to, creating a new cultural identity based in multiple societies and cultures. "[...] they reside in what might be termed a state of 'betweenness', orchestrating their lives transnationally and bifocally."³² An interesting facet of these

²⁹ Cf. Massey, Douglas S./España, F. García: "The Social Process of International Migration", in: *Science* 237 Issue 4816 (1987), pp. 733-738, here p. 736.

³⁰ Hugo, Graeme. J.: "Village-Community Ties, Village Norms and Ethnic and Social Networks: A Review of Evidence from the Third World", in: Gorden F. De Jong/Robert Gardner (Eds.), *Migration Decision Making*, New York: Pergamon Press 1981, pp. 186-224, here p. 209.

³¹ Cf. Portes, Alejandro/Guarnizo, Luis E./Landolt, Patricia: "The study of transnationalism: pitfalls and promise of an emergent research field", in: *Ethnic and Racial Studies* 22:2 (1999), pp. 217-237, here p. 228-229.

³² Smith, Michael Peter: "The disappearance of world cities and the globalization of local politics", in: Paul L. Knox; Peter J. Taylor (Ed.), *World cities in a world-system*, Cambridge, UK: Cambridge University Press 1995, pp. 249-266, here p. 255.

phenomena are policies of states which usually have to deal with emigration. Instead of trying to force their former citizens to return, they mobilize them by investing time into defending their rights in the target countries. Typical topics in these negotiations for example are to allow family members to follow after some time or to allow dual citizenship.³³

Recent examples include Turkish migrants in Germany and their children. The presidential elections for the Turkish parliament resulted in a disagreement between the Turkish and German government, who banned appearances of Turkish politicians campaigning for the upcoming election. The ban applies for all non-EU countries three month prior to any election, but was seen as specifically directed at Turkey, as the biggest Turkish diaspora with 1.4 million people able to vote is residing in Germany.³⁴ In general, the sense of remaining Turkish even after generations of living in Germany is prominent in German-Turkish communities. Thus, the connection between German-Turkish people and Turkey is still strong and experiences a renewal with the current generation regaining interest in the place of origin of their parents or grandparents.³⁵

On the other hand, people in Turkey call the migrants and their children “almancı”, which can be understood as “a Turkish from Germany.” It is a derogatory term encapsulating certain differences in culture that emerged and became visible through the temporal and spatial separation of the two cultures. A lot of it has to do with class, with the migrants originally often coming from more rural areas in Turkey and having taken this culture with them to Germany, where it got influenced especially by the German working class. This becomes most noticeable in the spoken Turkish of the “almancı”, which is based on older Turkish dialects and got interfused by German words and pronunciations.³⁶

The example of Turkish-German migration shows how complex transnational identities can become and how they are interdependent not only on a single actor but a whole network of individuals, institutions, cultures and societies. Global identities form themselves no longer

³³ Cf. Glick Schiller, Nina/Basch, Linda/Szanton Blanc, Cristina: “From Immigrant to Transmigrant: Theorizing Transnational Migration”, in: Ludger Pries (Ed.), *Transnationale Migration. Soziale Welt Sonderband 12*, Baden-Baden: Nomos 1997, pp. 121-140, here p. 124.

³⁴ Cf. N. N.: “Türkei drängt auf Wahlkampfauftritte in Deutschland”, in: ZEIT ONLINE, May 21, 2018, <https://www.zeit.de/politik/ausland/2018-05/recep-tayyip-erdogan-tuerkei-wahlkampf-auftrittsverbot>, accessed on July 27, 2019.

³⁵ Cf. Drach, Markus C. Schulte von: “Immer mehr Deutschtürken betrachten die Türkei als Heimat”, in SZ.de - Süddeutsche Zeitung, July 24, 2018, <https://www.sueddeutsche.de/politik/deutschuerken-integration-studie-1.4067731>, accessed on July 27, 2019.

³⁶ Robins, Kevin/Morley, David: “Almancı, Yavancı”, in: *Cultural Studies* 10:2 (1996), pp. 248-254.

through one place and culture, but rather through the interlocking and overlapping of cultures and societies. Classical national borders become less of a cultural separation, although they still remain their administrative and regulating function to control human movement.

It is very telling that it is nearly impossible to find examples of digital games using migration networks as a design principle. While economic theory lends itself perfectly to base models for numeric simulations on, migration networks are more context-based, rooted in individual experiences and thus less general. But even as stories of migration networks are not easy to be found in digital games, it seems that the topic of continuous migration demands some form of aesthetic realism, something digital games do not necessarily gravitate towards. Aside from technical realism in simulator genres like racing or farming and general visual realism, games have a tendency to strive for fantasy fulfillment or to portray rather extreme scenes outside of the typical everyday experience of humans. However, games like *THE WOLF AMONG US* (2013) and *THE WITCHER* series (2007 - 2016) have at least some elements that can be compared to the concept of migration networks. In *THE WOLF AMONG US*, the characters from our human fairy tales (called fables) are actual real beings, that had to flee their universe after it was invaded by an aggressor. They flee into the modern world, and some of them form a secret society in the middle of New York, where they set up a government-like network to help other fables to get by. There is also the so-called farm where fables that cannot pass as humans go and thus can be hidden from the humans. *THE WITCHER* (2007) on the other hand portrays a ghetto-like quarter in the city of Vizima, where Dwarfs and Elves live. This is more a commentary on racism than it is on migration, but the quarter can be seen as a physical representation of such a migration network where newly arrived dwarfs and elves might be able to go to get help and information. Different from these fictional settings, *BURY ME, MY LOVE* (2017) is set along the European refugee road through the Balkan area in 2015 and tells the story of a young Syrian woman trying to get to Europe. Her husband is still in Syria with them having the plan that he can follow her once she safely made it over. So in a way, this story touches on the very beginning of a migration network to be.

1.4 Integration and Assimilation

Similar to theories of migration, there are many approaches to analyzing and explaining integration. Looking at the 20th century, the oldest theories are related to the concept of assimilation. The research of assimilation began in the United States of America in the early

20th century. It is not surprising that first studies of integration started in the US, as it was one of the prime targets of immigration during that time, while European countries on the other hand were confronted with emigration and thus did not focus on integrating newly arrived individuals into their societies. Assimilation theories in the US can be separated into three main movements: the classic assimilation theory (CAT), the segmented assimilation theory (SAT) and the new assimilation theory (NAT).³⁷

The beginning of the classic assimilation theory can be found in Robert E. Park and Ernest W. Burgess' work "Introduction to the Social Sciences"³⁸, published in 1921, in which they interpret social interaction between people and groups as the fundamental act which forms societies, because it is the only way anybody is able to partake in them. Influenced by evolutionary theories, they see competition as the fundamental phase of social interaction. Overall, they separate social interaction into five phases: Contact, competition, conflict, accommodation and assimilation.³⁹ These phases are assumed to be always occurring, irreversible processes. In general, phase models are very common in assimilation theories. The early assimilation theories are very much influenced by the European migration movements to America and are based on empirical-analytical field work especially in Chicago. It highlights the importance of integration through several generations with the first having the most difficult time to adapt to the new culture and customs. Each following generation would then find fewer obstacles trying to adapt and integrate. This process was seen as naturally occurring, highlighting once more its connection to evolutionary theories.⁴⁰

After the Second World War and the experience of new immigration movements from South America and Asia into the US, younger researchers started to criticize the CAT interpretation of gradual assimilation by generations. New research indicated that not everybody assimilated into the American mainstream "core society" (understood as white, middle-class and protestant). Instead, a substantial part of the new population assimilated into the subcultures and lower class communities, which lead to their marginalization. This

³⁷ Cf. K. Hoesch: *Migration und Integration. Eine Einführung*, p. 83-84.

³⁸ Cf. Park, Robert E.; Burgess, Ernest W.: *Introduction to the Science of Sociology*, Chicago: The University of Chicago Press 1921.

³⁹ Cf. Han, Petrus: *Theorien zur internationalen Migration. Ausgewählte interdisziplinäre Migrationstheorien und deren zentrale Aussagen*, Konstanz/München: UVK Verlagsgesellschaft 2018, p.18.

⁴⁰ Cf. Park, Robert E.: "Human Migration and the Marginal Man", in: *American Journal of Sociology* Vol. 33 No. 6 (1928), pp. 881-893, here p. 891. Also cf. Aumüller, Jutta: *Assimilation. Kontroversen um ein migrationspolitisches Konzept*, Bielefeld: transcript 2009, p. 57.

process is described as “downward assimilation.”⁴¹ A third possibility is seen in a partial assimilation into the mainstream, while consciously holding on or reanimating another ethnic identity, connections and orientations. The segmented assimilation theory also differs from the CAT by understanding the assimilation process as open ended.⁴²

Research of the new assimilation theory criticized the SAT especially for its assumption that downward or segmented assimilation is more likely to occur than assimilation in the mainstream, which in the NAT is still seen as dominant. They suggest to consider the structural and demographic change of a society, which would change the probability of assimilation. In general, the NAT calls for a more differentiated understanding of ethnus. Instead of a relatively fixed definition, ethnic identities are seen as something ever shifting, which can blur into each other and emerge as something completely new. Thus, NAT research calls for the study of assimilation not only from the perspective of the “core society” as the CAT understood the American mainstream, but also from the perspective of the migrant communities and cultures.⁴³

Influenced by American authors and theories, the German sociologist Hartmut Esser is seen as one of the first and still influential researchers who started analyzing assimilation in the context of migration movements to and in Germany.⁴⁴ Central for his position is his understanding of the equal importance of a migrant’s as well as the host society’s disposition. For Esser assimilation is the disappearance of all systemic difference between different groups (for example: education, income, marriage behavior) while their individual differences (for example: political orientation, religion, culture) are maintained.⁴⁵ Interestingly, Esser argues that instances like religion should be an individual venture, which should not be supported by the state. Consequently, he is opposed to the teaching of confessional religion in school. This

⁴¹ Cf. Portes, Alejandro/Rumbaut, Rubén, G.: Legacies. *The Story of the Immigrant Second Generation*, Berkeley/Los Angeles/London: University of California Press 2001, p. 59.

⁴² Cf. ibid., p. 63.

⁴³ Cf. Alba, Richard/Nee, Victor: “Rethinking Assimilation Theory for a New Era of Immigration”, in: *The International Migration Review* Vol. 31 No. 4, Special Issue: Immigrant Adaptation and Native-Born Responses in the Making of Americans (1997), pp. 826-874, here pp. 863-865.

⁴⁴ Cf. Esser, Hartmut: Aspekte der Wanderungssoziologie. Assimilation und Integration von Wanderern, ethnischen Gruppen und Minderheiten. Eine handlungstheoretische Analyse, Darmstadt/Neuwied: Luchterhand 1980.

⁴⁵ Cf. Esser, Hartmut: Migration und ethnische Schichtung. Zusammenfassung einer Studie für das “Mannheimer Zentrum für Europäische Sozialforschung”, <http://library.fes.de/pdf-files/akademie/online/50366.pdf>, accessed on July 27, 2019, p. 2.

is the main difference of this approach to those of ethnic pluralism and multiculturalism, which strive towards a support for these kind of freedoms.⁴⁶

He argues that migrants are willing to assimilate into a new society and their customs, if they assume that this will help them reach their personal goals. However, it is important that the host society offers structures and opportunities to enable this process. This could be things like language courses and other education programs, but also the willingness of the native population of friendly interaction and neighborship. An alternative to these possibilities, according to Esser, is the existence of an ethnic community, that would offer a form of alternative integration for migrants and would supply them with an ethnic labor market, clubs and organizations. His description fits the aforementioned networks of migration, but he is more critical of them. Because these communities can exist at least partly separated from the rest of the society, they can lead into a mobility trap, because the migrant does not learn the necessary skills to interact with and work in the host society fully. This then leads to a continuous segmentation as described by the SAT.⁴⁷

Social Integration according to Esser then is divided in four dimensions of assimilation: cultural, structural, social and identificational. Cultural assimilation is the acquisition of knowledge and skills. Structural assimilation includes the occupation of positions which are integral for the continued existence of the society. This could be by participating in the country's local labor market and education system and ultimately gaining the full rights of political participation through naturalization. Social assimilation happens through interaction and entanglement with the members of the native society on an everyday basis. Interethnic marriage can be seen as one of the strongest indicators of social assimilation. Identificational assimilation describes the final stages of an assimilation process, when an individual starts to feel an emotional affiliation to the host country's society.⁴⁸

Looking at digital games, ludic examples which deal with integration are hard to find. Some concepts exist, mainly in the area of serious and applied games, some of which we will cover in the next chapter about ethnic pluralism. Game narratives on the other hand broached the issue more frequently even in mainstream games. *MAFIA 2* (2010) lets players experience the story of Italian immigrant Vito Scaletta, who after a failed robbery joins the US army to

⁴⁶ Cf. ibid., p. 5-6.

⁴⁷ Cf. K. Hoesch: *Migration und Integration. Eine Einführung*, p. 90.

⁴⁸ Cf. ibid., p. 92.

fight in World War 2 and avoid prison. After he returns home he is forced to work for the criminal underworld to help support his family. The connection to this kind of life is set up by his also Italian childhood friend Joe Barbaro. Although MAFIA 2 is obviously borrowing its setting, narrative and visual presentation from the subgenre of the gangster film, it clearly depicts ethnic communities and their dynamics. Similar to Esser's description, these connections lead down a certain path of marginalization, which Vito only is able to escape by turning to a life of crime. Similarly, Nico Bellic, the protagonist of GRAND THEFT AUTO IV (2008) and Eastern European immigrant to the US, is swept up in a life of crime at the brink of the American society. Although these games draw on popular themes of crime films and ethnic clichés, they nonetheless take on the topic of marginalization that certain ethnic groups and immigrants face in the United States.

1.5 Ethnic Pluralism and Multiculturalism

In contrast to most assimilation theories and comparable to the criticism of the NAT mentioned before, integration concepts described as ethnic pluralism and multiculturalism all share the presumption that there is no such thing as a "core society." Instead, multiple cultures are co-existing alongside each other. The Canadian social theorist Charles Taylor argues that identity is not the product of individuals, which is formed through its relationship with a state, but instead is created through the interaction with a specific group of people. Therefore, identity is not the result of a monologue but a dialogue.⁴⁹

Especially important for Taylor is acceptance, meaning appreciation of social groups by the state and other groups, based on the principle of equality. However, the acceptance of social groups and their disposition creates a problem with the rights of individual freedom in Western liberal countries. Since the Enlightenment, Western societies have developed the principle that nobody can be discriminated against because of individual special features. Taylor argues that this kind of "blindness" towards differences can lead to a homogenization of a society. Instead, he proposes that there are communities that require protection and care. Otherwise, they would vanish under the pressure of assimilation by more dominant groups.⁵⁰ Thus, he calls for a policy of difference:

⁴⁹ Cf. Taylor, Charles: *Multiculturalism. Examining the Politics of Recognition*, Princeton (New Jersey): Princeton University Press 1994, p. 32-33.

⁵⁰ Cf. ibid., p. 40.

Similar conflicts arise today around the politics of difference. Where the politics of universal dignity fought for forms of nondiscrimination that were quite 'blind' to the ways in which citizens differ, the politics of difference often redefines nondiscrimination as requiring that we make these distinctions the basis of differential treatment.⁵¹

Technically, this is a form of positive discrimination, which protects the disadvantaged by giving them special rights for a certain time, but also makes multiculturalism seemingly incompatible with modern ideas of liberal freedom, non-discrimination and individual equality. This cultural relativism is a weak point which is often used by critics and politicians to attack arguments of ethnic pluralism and multiculturalism. This makes these theories hard to argue for in the political debates as they require complex analysis and careful consideration. Taylor asks to consider the parallel existence of opinions on how life has to be ordered and understood, notably that everyone and every culture strives for recognition and respect.⁵² In more general terms, concepts of multiculturalism see western Liberalism not as a basic, neutral concept, but as one among many which all have to be considered when governing the coexistence of different cultures and ethnicities.

Similar to Taylor's multiculturalism but based less on normative-philosophical assumptions and instead rooted in empirical-analytical research, the study of ethnic communities and migrant organization highlights the potential of integration within an ethnic group that can also induce integration of migrants into a host society. This directly contradicts Hartmut Esser's aforementioned argument that the integration into ethnic communities can lead into a social trap. Fittingly, the debate around the usefulness of migrant organizations in Germany has been started by a direct response to Esser's early works by ethnographer and sociologist Georg Elwert in the early 1980s. Elwert argues that three instances are especially important in strengthening the migrants' positions through communities and organizations: Firstly, a common surrounding that creates familiarity in an otherwise largely unknown society can help to keep self-confidence up, which is very much needed to confront a new environment; secondly, the access to necessary everyday knowledge; and thirdly, the creation of pressure groups to represent common interests.⁵³ Again, we can see a common line with the migration network theory here.

⁵¹ Ibid., p. 39.

⁵² Cf. Ibid., pp. 68-70.

⁵³ Cf. Elwert, Georg: "Probleme der Ausländerintegration. Gesellschaftliche Integration durch Binnenintegration", in: *Kölner Zeitschrift für Soziologie und Sozialpsychologie* 4 (1982), pp. 717-731.

As a theoretical basis for this research, the concept of social capital is integral. Without going into too much detail, social capital was most prominently described by Pierre Bourdieu, who expanded on the idea of capital by splitting it into several forms, one of which is social capital. He describes social capital as the entirety of actual and potential resources, which are connected to the possession of a persistent network of more or less institutionalized relationships based on mutual knowledge and acknowledgment. Simply said, these are resources based on affiliation to a group.⁵⁴

For the research of migration and integration, the concepts of weak and strong relations are of special importance. Hanspeter Kriesi mentions relationships with friends and family as an example of strong relations, while he describes weak relations as comparable to superficial acquaintances.⁵⁵ Strong relations have the tendency to lead to closed communities, while weak relations help to connect communities. A good example for a scenario in which weak connections would be useful is the search for a new job. While strong relations can create well-defined identities within small groups, weak relations can connect these small groups with one another and also lead to the forming of identity in big social groups.

An interesting example is the comparison of the successful integration of Spanish migrants and the less successful integration of Italians into Germany. Looking at typical migrant organizations, Uwe Hunger discovered that the majority of Spanish migrant organizations was dedicated towards education and representation. These organizations ironically often defied the paternalizing approach with which (West-)Germany approached integration until the 1980s to represent their wishes and needs, especially in the context of education.⁵⁶ The Italian communities on the other hand tended to focus on the formation of culture and sport clubs and although they generally tended to follow the German administration's lead more closely, their integration was less successful.⁵⁷ This can be observed by comparing the successful integration of Spanish children into the common

⁵⁴ Cf. Bourdieu, Pierre: "Ökonomisches Kapital, kulturelles Kapital, soziales Kapital", in: Reinhard Kreckel (Ed.), *Soziale Ungleichheiten* (Soziale Welt Sonderband 2), Göttingen: Nomos 1983, pp. 183-199, here p. 191.

⁵⁵ Cf. Kriesi, Hanspeter: "Sozialkapital. Eine Einführung", in: Axel Franzen/Markus Freitag (Eds.), *Sozialkapital. Grundlagen und Anwendungen* (Kölner Zeitschrift für Soziologie und Sozialpsychologie Sonderheft 47), Wiesbaden: Springer VS 2007, pp. 23-46, here p. 38.

⁵⁶ Cf. Hunger, Uwe: "Von der Betreuung zur Eigenverantwortung: neuere Entwicklungstendenzen bei Migrantenvereinen in Deutschland", in: *Münsteraner Diskussionspapiere zum Nonprofit-Sektor* 22 (2002), <https://nbn-resolving.org/urn:nbn:de:0168-ssoar-372237>, accessed on July 28, 2019, here pp. 8-9.

⁵⁷ Cf. ibid., p. 11.

German school system to the Italian children that stayed in special schools for a long time and therefore had a reduced chance of educational and social advancement.⁵⁸

Commercial games rarely include aspects of multiculturalism in their procedural rhetoric and mechanics. A simple explanation for this absence is that multiculturalism cannot be easily broken down into simulatable processes with clear inputs and outputs. STELLARIS can be seen as an example, which incorporates a policy system at least comparable to Taylor's thoughts on governing multiple ethnicities:

Species rights is a system where the rights of species in an empire can be determined. The rights can be determined individually for each species in- and outside of the empire. Rights can be changed every 10 years. What rights can be selected depends on if the species is the main species of the empire, what ethics the empire has, active policies and government forms.⁵⁹

The game allows to set different rights based on species, which is determined by certain factors, like ethics and government forms, therefore reflecting a biased and unequal approach to government when it comes to different cultures. In STELLARIS these systems are all related to the economics of an empire, as this is the focus of the game. But it shows that especially in strategy games there is the possibility to integrate complex policies on a systemic level.

Aside from commercial games, serious and applied games have approached these issues more from a pragmatic standpoint with the development of games designed to help the integration process. The EU funded MASELTOV⁶⁰ project, for example, was developed with the goal to support cultural learning amongst immigrants by using game-based learning technologies: "It is suggested that a game may provide a resource which allows users to identify though [sic] analogy areas in which cultural differences are most prominent, the form these differences might take, and strategies to address them."⁶¹ Similarly, ANTURA AND THE LETTERS (2018) aims to provide the children of refugees from Arabic speaking countries with a playful possibility to learn reading and writing Arabic. Looking at Taylor, this is an especially interesting case, as the game does not primarily aim to integrate migrants and refugees into

⁵⁸ Cf. K. Hoesch: Migration und Integration. Eine Einführung, p. 108.

⁵⁹ N. N.: "Species rights", https://stellaris.paradoxwikis.com/Species_rights, accessed on July 28, 2019.

⁶⁰ MASELTOV stands for "Mobile Assistance for Social Inclusion and Empowerment of Immigrants with Persuasive Learning Technologies and Social Network Services".

⁶¹ Dunwell, Ian/Lameras, Petros/Stewart, Craig/Petridis, Pangiotis/Arnab, Sylvester/Hendrix, Maurice/de Freitas, Sara/Gaved, Mark/Schuller, Björn/Paletta, Lucas: "Developing a digital game to support cultural learning amongst immigrants", in: *First International Workshop on Intelligent Digital Games for Empowerment and Inclusion* (2013), <https://www.researchgate.net/publication/258290300>, accessed on July 28, 2019.

a host society, but rather offering a possibility for them to stay connected to one of the most profound connections to their cultural heritage: their language.

2. Administrative Processes of Migration and Integration

2.1 The Distribution of Migration and Integration Politics

The actors influencing and controlling migration and integration politics vary greatly depending on the national state and its political system. In this study we look in general into migration into Western European countries and the US, with a special focus on migration from Turkey to Germany. Accordingly, we will focus in the following on analyzing actors and institutions in the Federal Republic of Germany.

In Germany, migration and integration policies are influenced by three different administrational instances that also structure the German republic in general. Firstly, there is the so-called “Bund”, which is the highest national instance represented by the federal government. The legislation is administered by the “Bundestag”, the federal parliament, which is further influenced by the “Bundesrat”, the federal council. The council consists of representatives of the different states called “Länder” of the Federal Republic of Germany. It enables these states to directly influence federal policies and laws. Secondly, “Länder” can create their own local policies regarding migration and integration. And thirdly, the smallest administrative unit influencing migration and integration are the communes, the “Kommunen”, comparable to the US-American municipalities. Traditionally, they had the most concrete approaches to integration politics as the federal government did not offer unified policies regarding migration until the early 2000s.⁶²

To prevent confusion we will refer to these instances by their German names in the following: “Bund” for the federal state, “Länder” for the states it consists of and “Kommunen” for the communes/municipalities.

In general, the “Bund” is responsible for the administration of all general migration policies, while the “Länder” and “Kommunen” oversee their execution. Its most important task is the regulation of the temporary and permanent residence permits for migrants. This entails the creation of rules and regulations on the basis of which permits are granted and issued, and applies to all forms of migrants: people looking for better work and citizenship, refugees and all other forms. The processes that lead to the creation of these policies are

⁶² Cf. K. Hoesch: *Migration und Integration. Eine Einführung*, pp. 302-303.

complex and will not be described here in detail.⁶³ It is only important to know that the legislation of migration and integration is controlled by the “Bund” with the “Länder” having only minimal influence on their orientation. However, in reality the different interpretation of these laws by the “Länder” led to substantial differences in the regions of Germany.⁶⁴

Its control over the legislation does not mean that the “Bund” has complete decisive power over all aspects of migration. There are several areas in which it has to cooperate with the “Länder” and other institutions. Two examples include the distribution of refugees, which has to be organized in cooperation with the “Länder”, and labour migration, which depends on the Federal Employment Agency. On top of this, the funds for offering guidance for migrants in the first three years of their stay in Germany are provided by the “Bund”. For this it works closely together with established welfare organisations like the Caritas or the German Red Cross, which have been working in this field long before the state got involved.⁶⁵

It is worth noticing that it is unusual for the “Bund” to have this much influence on migration policies of the “Länder”. It even allows a direct cooperation with the “Kommunen” without the need to consult the “Länder”. In every other political matter this would be strictly forbidden.⁶⁶

This change started in 2005, when the German state started to officially recognize its status as an immigration country and the importance of integration policies via legislation. This led to the founding of the Federal Office for Migration and Refugees (BAMF), which originated from previous agencies that partly oversaw matters of refuge. Gesemann and Roth concisely describe that with the BAMF, an agency was created that acted on a federal level and did not only focus on the recognition of refugees but implemented fundamental elements of the integration policies of the “Bund” on their own account. These were designed to

⁶³ For an overview of the details of the German federal system, cf. Leptien, Kai: “Germany’s Unitary Federalism”, in: *IMIS-Beiträge* 43 (2013), Special Issue: Dietrich Thränhardt (Ed.): Immigration and Federalism in Europe. Federal, State and Local Regulatory Competencies in Austria, Belgium, Germany, Italy, Russia, Spain and Switzerland, pp. 39-47.

⁶⁴ Cf. Gesemann, Frank/Roth, Roland: *Integration ist (auch) Ländersache! Schritte zur politischen Inklusion von Migrantinnen und Migranten in den Bundesländern* (Eine Studie des Instituts für Demokratische Entwicklung und Soziale Integration (DESI) für die Friedrich-Ebert-Stiftung, Forum Berlin) Berlin: Friedrich-Ebert-Stiftung 2014, p. 19.

⁶⁵ Cf. K. Leptien: Germany’s Unitary Federalism, pp. 42-43.

⁶⁶ Cf. Thränhardt, Dietrich: “Migration und Integration als Herausforderung von Bund, Ländern und Gemeinden”, in: Frank Gesemann/Roland Roth (Eds.), *Migration und Integration als Herausforderung von Kommunen*, Wiesbaden: Springer VS 2009, pp. 267-278, here p. 271.

centralize the supply of language and general integration courses but also academic studies and conferences regarding the role of religion, especially of Islam, in the integration effort.⁶⁷

As already mentioned, the “Länder” have a few possibilities to interpret and shape the federal integration policies. This is especially the case for political areas traditionally controlled by the “Länder,” like the administration of cultural programs, schools and education, but also in the creation of advisory boards for immigrants. For example, in the highly selective school systems in the South German “Länder”, the dropout rate of young migrants is much higher than in others. This also explains the low rates of migrants having one of the two highest school certificates, “Abitur” or “Fachabitur”.⁶⁸ Other factors can be the existence of specific religious education and how the education of the teachers is organized. But also the existence of special language tests for kids in the preschool age can help the integration effort. This was first implemented in the region of North Rhine-Westphalia, but later adopted by other “Länder”.⁶⁹

Dietrich Thränhardt states that the rates of naturalization in the different “Länder” are highly varying. The ones with the highest rates are two to three times higher than the ones with the lowest. He explains this with the general political attitude towards migration and integration and the local interpretations of federal law, as well as how much liberty the Ministries of the Interior of the different “Länder” give to their “Kommunen” to decide matters on their own.⁷⁰

The “Kommunen” were the political instances in which the necessity for integration policies was recognized the earliest. They form the administration on site, the place where people interact directly and mostly for the first time with the representatives of the Federal Republic of Germany. Therefore, it might not be surprising that the “Kommunen” started to develop programs for integration as early as the 1970s, after it became clear that many from the first generation of guest workers decided to stay. But this work was by no means consistent and differed highly between the communes. The reason for this was among others that early integration work was very much depended on voluntary work.⁷¹

⁶⁷ Cf. F. Gesemann/R. Roth: Integration ist (auch) Ländersache, p. 11.

⁶⁸ Cf. D. Thränhardt: Migration und Integration als Herausforderung von Bund, Ländern und Gemeinden, p. 271.

⁶⁹ Cf. ibid., p. 17.

⁷⁰ Cf. ibid., p. 273.

⁷¹ Cf. K. Hoesch: Migration und Integration. Eine Einführung, pp. 307-308.

The role of the “Kommunen” for the integration of migrants is in general ambivalent. On the one hand, it is logical that these issues are being negotiated where they occur and not in some distant federal agency. On the other hand, the action of scope of the “Kommunes” is limited by the laws, regulations and distributed responsibilities of the “Bund” and the “Länder.”⁷²

Kirsten Hoesch describes, how since the 1970s with the continuous expansion of the welfare state, the “Kommunen” had to take on increasingly more tasks, which had to be financed and organized. This made them highly dependent on the “Länder” and the “Bund”, the instances which issue most of the money, which is needed for these tasks. The “Kommunen” have to execute migration and integration policies and live with their consequences without having any possibilities to influence them.⁷³

At the same time, they are also the first instance through which migrants come in contact with the state. Government workers represent the Federal Republic in the immigration offices of the cities, with the rest of the government organisations of the “Kommune” having to implement and execute state policies like the aforementioned language courses. At this level the abstract legislation becomes concrete action. It is here that the policies manifest themselves and the migrants become the audience of the political and administrative processes that organize and order the Federal Republic of Germany.⁷⁴

2.2 The Role of Administration

As just described, the communal interpretations of migration and integration policies are quite different. This becomes especially important for the government agencies in the “Kommunen”, which are tasked with executing said policies. Often overlooked in the research of migration, it is the immigration offices, registration offices, civil registry offices and others that have to interpret, enact and work together to shape laws into reality.⁷⁵

The varying results of the different policy interpretations in Germany can be especially seen in the practices of naturalization in the different “Länder” as well as “Kommunen”.

⁷² Cf. Baraulina, Tatjana: "Integration und interkulturelle Konzepte in Kommunen", in: Aus Politik und Zeitgeschichte 22/23 (2007), pp. 26-32, here p. 26.

⁷³ Cf. K. Hoesch: Migration und Integration. Eine Einführung, p. 308.

⁷⁴ Cf. Bommes, Michael/Schmidt, Susanna/Voß, Josef: "Vorwort der Veranstalter", in: Jörg Alt/Michael Bommes (Eds.), Illegalität. Grenzen und Möglichkeiten der Migrationspolitik, Wiesbaden: VS Verlag für Sozialwissenschaften 2006, pp. 13-18, here p. 13.

⁷⁵ Cf. K. Hoesch: Migration und Integration. Eine Einführung, p. 311.

Compared to other countries, its rate is still very low in Germany. One of the reasons for this is seen in the general prohibition of dual citizenship. Countries that allow this have generally a much higher rate of naturalization.⁷⁶ The execution of this prohibition differs greatly from region to region in Germany, which is rooted in the open formulation of the law that handles dual citizenship. Although generally prohibited, it is open to interpretation as it allows dual citizenship in special cases like financial reasons or political repercussions.

According to Daniel Naujoks, around 50% of migrants who apply for naturalization kept their former citizenship in the years between 2003 - 2007. However, there are immense differences based on the migrants' place of origin. While people from Iran, Morocco and Afghanistan could keep their citizenship in nearly 100% of the cases, 66% of the migrants from the Russian federation and 80% of Ukrainian migrants did this. In contrast, the percentage of Turkish migrants being allowed to keep their citizenship is extremely low with only 15,6%. This led to discussions about discrimination in the discourse of dual citizenship, which is interpreted as a deliberate effort to hinder the naturalization of certain groups.⁷⁷

Above this, differences in handling dual citizenship become apparent in the different "Länder" and "Kommunen". For example, Bavaria only allows it in special cases, although even here a more tolerant tendency is arising. Compared to one of the more lenient states like Rhineland-Palatinate, the differences become apparent though. While Bavaria allowed in 38,5% of the applications for dual citizenship in 2008, Rhineland-Palatinate allowed 55% in the same time. In Koblenz, a city within this state, the quota was even at 75%.⁷⁸ These numbers show how the different practices within the "Länder" themselves can vary.

Dietrich Thränhardt states that these differences are especially linked to the administrational procedures in the naturalization process: The intensity of necessary paperwork influences in general the length of the process, which is highly influenced on how

⁷⁶ Cf. Böcker, Anita/Thränhardt, Dietrich: "Einbürgerung und Mehrstaatigkeit in Deutschland und den Niederlanden", in: Dietrich Thränhardt/Uwe Hunger (Eds.), *Migration im Spannungsfeld von Globalisierung und Nationalstaat* (Leviathan Sonderheft 22), Wiesbaden: Westdeutscher Verlag 2003, pp. 117-134, here pp. 119-120.

⁷⁷ Cf. Naujoks, Daniel: "Die doppelte Staatsbürgerschaft. Der Diskurs um ethnische und politische Grenzziehung in Deutschland", in: Focus Migration Kurzdossier Nr. 14 (Bundeszentrale für politische Bildung) (2009), <http://www.bpb.de/gesellschaft/migration/kurzdossiers/57272/die-doppelte-staatsbuergerschaft-der-diskurs-um-ethnische-und-politische-grenzziehung-in-deutschland>, accessed on August 26, 2019.

⁷⁸ Cf. Thränhardt, Dietrich: *Einbürgerung. Rahmenbedingungen, Motive und Perspektiven des Erwerbs der deutschen Staatsangehörigkeit. Gutachten für die Friedrich-Ebert-Stiftung* (WISO Diskurs, Expertisen und Dokumentationen zur Wirtschafts- und Sozialpolitik), Bonn: Friedrich-Ebert-Stiftung 2008, <http://library.fes.de/pdf-files/wiso/05236.pdf>, accessed August 26, 2019, pp. 25-26.

the “Kommunen” individually interpret federal law. On top of that it depends on how the agencies of the different “Länder” are trying to influence these processes in detail. All of this directly influences the rates and quotas of naturalization and leads to the phenomena of some “Länder” having three times higher rates than others.⁷⁹

Apart from these interpretational differences, simple practical instances have to be considered, which can influence the way the “Kommunen” are able to execute government policies. This depends especially on how autonomous the offices and agencies can decide on applications or if the applications must also be checked and approved by state agencies. Likewise important is the actual personnel the agencies and offices have to their disposal, how well it is trained and how many people are working in the offices. This is directly influenced by the amount of money and tasks that the “Länder” give and delegate to their “Kommunen”. Heike Hagedorn provides an example of this phenomena, by comparing the successful processing of applications in the city of Gelsenkirchen and the commune of Coesfeld in 1997. In Gelsenkirchen, the processing time was between two and four weeks with a success rate of 94,8%. In Coesfeld the applications took between twelve and 24 months with a success rate of only 35,3%. Both Gelsenkirchen and Coesfeld are located in the Northern part of North Rhine-Westphalia, just 70 kilometers apart. It should be noted that problems did not arise in the city, which had to handle a lot of requests, but instead in the rural region with just a few cases.⁸⁰

The distribution of tasks between “Bund”, “Länder” and “Kommunen”, as well as the different possibilities their interaction allows their administrations, extends even into non-governmental institutions. Either the state delegated tasks to them or they have established themselves as gatekeepers and organizers for specific sectors, which makes them important for aspects of migration which do not directly relate to the “Bund” or the “Länder”. Especially important are those actors, which oversee the recognition of qualifications needed for the labor market. Next to the formal process of naturalization, this is the second obstacle for labor migrants, who wish to perform a specific job in Germany. A good example would be medical doctors, which have to be recognized by an abundance of different state and other organizations before they are allowed to practice their craft. As we are focussing on the

⁷⁹ Cf. ibid., pp. 43-44.

⁸⁰ Cf. Hagedorn, Heike: *Wer darf Mitglied werden? Einbürgerung in Deutschland und Frankreich im Vergleich*, Opladen: Westdeutscher Verlag 2001, pp. 60-61.

governmental apparatuses in this work, we will not describe this in more detail. However, it is worth noting as it highlights one more time how deeply intertwined the governmental apparatuses are with other actors in all economic and administrational sectors of the republic.⁸¹

⁸¹ Cf. K. Hoesch: *Migration und Integration. Eine Einführung*, p. 314-315.

2.3 Apparatuses of Security

In this chapter so far, we have explored and analyzed the different political and administrational instances that influence migration and integration policies as well as their execution. We talked about the federal state, the “Bund”, issuing laws and regulations, while its states, the “Länder”, delegate these in form of tasks further to the communes, the “Kommunen”. We have also seen, that this is not a purely hierarchical structure, with competencies changing from region to region, different involvement and more or less entanglements of the different instances. We have seen further how important the actual offices and their organization is for a successful implementation of policies. In this section, we will relate all of this information to the concepts of government and governmentality by understanding the aforementioned institutions as “apparatuses of security”, which are used to control the state’s population according to its laws, regulations and opportunities.

As mentioned in the introduction, security does not merely describe the protection from a perceived threat, but rather means in conjunction with “control” the guidance of a group of people towards specific goals, while representing the group’s interests. These interests and goals are of course not uniformly agreed on, but rather are constantly formulated anew by the members of the group under the surveillance of the “apparatuses of security”. Thus, it is an ever-changing interdependent system, which does not conform to a moral standard or any one ideal, but rather formulates strategies to ensure the continued existence of its population. Fittingly, Dean Mitchell defines government in the context of power and rule in modern society:

Government is any more or less calculated and rational activity, undertaken by a multiplicity of authorities and agencies, employing a variety of techniques and forms of knowledge, that seeks to shape conduct by working through the desires, aspirations, interests and beliefs of various actors, for definite but shifting ends and with a diverse set of relatively unpredictable consequences, effects and outcomes.⁸²

Border politics are an eminent manifestation of the security policies of national states. Consider the US government increasingly creating restrictive immigration policies following a narrative of security, which could be observed in the aftermath of the terror attacks on September 11, 2001, as well as with the European Union trying to mitigate refugees away from the territories of its member states. Didier Bigo describes this specific form of policies as

⁸² Mitchell, Dean: *Governmentality. Power and Rule in Modern Society*, London/Thousand Oaks/New Delhi/Singapore: SAGE Publications 2010, p. 18.

“securitization”. “Securitization of the immigrant as a risk is based on our conception of the state as a body or a container for the polity. It is anchored in the fears of politicians about losing their symbolic control over the territorial boundaries.”⁸³ But this is only one very obvious manifestation of security politics. Foucault’s “apparatuses of security” will enact their function no matter how open or restrictive state policies, not only regarding immigration, are being issued. This general view on government is particularly interesting for us as this is the framework in which “control” and “security” manifest themselves. “[...] government here involves some sort of attempt to deliberate on and to direct human conduct.”⁸⁴

For immigrants, the “apparatuses of security” manifest themselves in different ways. On the one side, there are the national borders with their security guards, police and military that might try to block or help crossing borders. On the other side, there are those agencies that immigrants have to directly work together with once they have entered a country successfully. The most important of these, in the case of Germany, is the immigrant office. As described before, it is here that all the policies and regulations manifest themselves into action. It is here that the migrant is experiencing the governmentality of the state first hand. It is also here that it becomes clear that government and governmentality is not a uniform phenomenon that presents itself as a consistent entity. It depends not only on laws and regulations, but also on the actual people in the offices, the representatives of the state, how the governmentality is shaped into reality. In a way, the office workers are the actors in a play that is supposed to portray a clear vision of structure, control and security. This play is interpreted by different directors in the “Länder” und “Kommunen”, but in the end also by the actors (e.g. the office workers) and the audience (e.g. the migrants themselves).

This metaphor of a giant play already hints at its very interactive nature that defines its twists and turns and thus lends itself to be explored through interactive media. Looking at games, we can find several examples that revolve around the concept of the state, identity, security and control, and are thus situated within the discourse of governmentality. ORWELL (2016) puts you in the shoes of a government worker tasked with investigating “the lives of citizens to find those responsible for a series of terror attacks. Information from the internet, personal communications and private files are all accessible to [the player].”⁸⁵ This short

⁸³ Bigo, Didier: “Security and Immigration: Toward a Critique of the Governmentality of Unease”, in: *Alternatives* 27 (2002), pp. 63-92, here p. 65.

⁸⁴ D. Mitchell: *Governmentality*, p. 18.

⁸⁵ N. N.: “ORWELL Steam Page”, <https://store.steampowered.com/app/491950/>, accessed on August 28, 2019.

description from the official Steam page of the game describes the stance of the game accurately. It is a game reflecting on the actions of government agencies like the US American National Security Agency (NSA). In 2013, the whistleblower Edward Snowden revealed the scale on which the NSA spied on people and other governments. The justification of the NSA and other agencies in the aftermath of the reveal was that the massive surveillance even without having proper cause was aimed at preventing terror attacks.⁸⁶ Similarly, ORWELL tasks players in investigating people with the help of a software which allows them to access private data without restriction. However, players can never be sure if their conclusions and the connections they made are actually correct. To progress the player has to trust the system. While this game approaches the topic of security and government from a critical standpoint, it shows how a game can show rather than tell the workings of a complex system.

While ORWELL offers a minimalistic experience that is completely focused on letting the players discover the game's narrative through a simple web browser interface, PRISON ARCHITECT (2015) gives players control over a whole prison, which they are tasked to build, run and govern. This is a micromanagement game, in which players have to manage and coordinate the construction of cells and facilities, but also hire different kinds of staff members and assign them tasks, while keeping the finances of their prison straight and the inmates content. Bad management can lead to revolts. The government also exists in the game as an abstract actor that is judging the player's performance in running the prison. PRISON ARCHITECT is modelling a micro society, whose goal is to reform their inmates back to good citizens at best, but at least run this society of misfits without conflicts arising. The prison, as a correction facility for people that did not behave in line with a state's standards and rules, is one of the most extreme "apparatuses of security". By plotting players as the overseer of such a facility, PRISON ARCHITECT implicitly confronts players with the "procedures, analyses [...], reflections, [...] calculations and tactics,"⁸⁷ which a state uses to control its population. Although PRISON ARCHITECT does not try to model its system closely related to real world

⁸⁶ Cf. i.a. Greenwald, Glenn: "NSA collecting phone records of millions of Verizon customers daily", in: The Guardian, June 6, 2013, <https://www.theguardian.com/world/2013/jun/06/nsa-phone-records-verizon-court-order>, accessed on September 22, 2019. Also cf. N. N.: "US-Geheimdienstetat wurde seit „9/11“ verdoppelt", in: Welt.de, August 30, 2013, <https://www.welt.de/politik/ausland/article119555291/US-Geheimdienstetat-wurde-seit-9-11-verdoppelt.html>, accessed on September 22, 2019.

⁸⁷ M. Foucault: Governmentality, p. 102.

processes, the mentality of its micromanagement simulation reveals the inner logic of what Foucault calls “governmentality.”⁸⁸

PAPERS, PLEASE (2013) could be situated in between the two aforementioned games. This positioning works not only from a gameplay perspective, but also in the way it thematizes government and security. In PAPERS, PLEASE players control a border officer who has to check passports and other papers to determine if their holders are allowed to enter the country. Similar to ORWELL these actions are related to an investigative form of control, which is guided by a mostly invisible government guiding and instructing the player’s actions. The player is tasked with checking data, in this case passports, visas and other forms, to determine if the persons that this data is linked to are actually who they are and honest about their intentions. The link to PRISON ARCHITECT manifests itself in the space PAPERS, PLEASE is set: Like the prison, the border region represents and enforces the sovereignty of a state with full force. Negotiations are possible but harsh, and confronted with the judgement of the government, players can feel as helpless as the NPC actors they are supposed to manage in control. While in PRISON ARCHITECT this manifests itself through the government influencing your decisions by offering grants, issuing prisoners and ultimately judging your performance, PAPERS, PLEASE goes a step further: If players do not behave according to the issued state commands, their pay is reduced, which directly influences their ability to pay for the necessary goods to keep their in-game family healthy and alive. The governmentality of the state in PAPERS, PLEASE is a harsh one. It creates an image of a restrictive and unforgiving state that does not tolerate failure or error, neither of migrants trying to enter nor of their own citizens. PRISON ARCHITECT is similar, but players are always left with the sense of agency and having at least retained some of their power to act. Players are made to feel powerless in PAPERS, PLEASE. ORWELL handles this similarly by giving players a sense of agency, only to remind them eventually how little influence they actually have on the events they were supposed to investigate. Government in ORWELL appears more hidden, layered and unpredictable than in PRISON ARCHITECT and PAPERS, PLEASE, and is clearly reminiscent of the deep mistrust of government the global surveillance disclosures since 2013 have instilled in people.

⁸⁸ At this point, we have to mention the obvious connection that could be made here between PRISON ARCHITECT and Foucault’s work on the Western penal system, especially “Discipline and Punish” from 1975. As we are more interested in “governmentality” in general and related to migration, we only leave this link here for further reading and exploration: Foucault, Michel: *Discipline and Punish. The Birth of the Prison*, New York: Random House 1995.

These three examples, PAPERS, PLEASE especially relating to migration through its border setting, show how games can be used to engage players with the concept of governmentality. Their modelling of governmental institutions and programs lets players experience the inner workings of these “apparatuses of security.”

3. From Singleplayer to Audience Spectacle

3.1 Procedurality - From Linear Storylines to Immersive Sims

When it comes to digital games, procedurality is their defining medial property. Already in 1997, Janet Murray writes: "The most important element the new medium adds to our repertoire of representational powers is its procedural nature, its ability to capture experience as systems of interrelated actions."⁸⁹ This description focuses on the possibility to model systems through which behaviors can be embodied. This is especially important in contrast to older media (like writing or film), whose core representational moment was the description or depiction of systems rather than the possibility to model and experiment with them.⁹⁰ This means digital games are by default procedural, because they are software running on a computer.

Another more practical way to describe procedurality is that it refers to software's ability to generate representations of rule-based models through algorithms.⁹¹ This means procedural media is able to simulate how systems behave and allow players to experience them on their own accord.⁹² The multiplicative nature of abstracting systems allows tailor-made experiences and transforms the audience in ways that was not possible with earlier types of media. Looking at games, it is the degree of affordances a game provides within its rules. Through these affordances, a story or an experience changes or adapts to the player, making each one unique or at least one amongst many.

As we discussed in the earlier chapters, governmentality, especially within the context of immigration, entails procedures, rules and calculations to form complex relationships between people and power. While these relationships are on the one hand mainly informed and structured by complex administrative units, they are also shaped by many less influential agents like single immigration offices, office workers and visiting migrants. For the exploration of governmentality in a digital game, it is therefore important to not only reduce these relationships to an abstract top down view of a giant administrative machine,

⁸⁹ Murray, Janet H.: *Hamlet on the Holodeck. The Future of Narrative in Cyberspace*, New York et al.: The Free Press 2016, p. 254.

⁹⁰ Cf. Freyermuth, Gundolf S.: *Games | Game Design | Game Studies*, Bielefeld: transcript 2015, pp. 53-57.

⁹¹ Cf. Bogost, Ian: *Persuasive Games. The Expressive Power of Videogames*, Cambridge/London: The MIT Press 2007, p. 4.

⁹² Cf. Gundolf S. Freyermuth: *Games | Game Design | Game Studies*, p. 67.

but rather highlight how these different instances interact with and influence each other. In other words, the specific is as important as the abstract, the individuum matters just as much as the larger society around it.

There seems to be a problem however, if we compare typical conceptions of complex, abstract systems and personal experiences of single individuals. While systems lend themselves to be modelled and interacted with, or played with in the context of games, personal experiences rather take the form of linear stories that account for a perceived sequence of events. This difference is directly connected to one of the core academic and design problems that has been discussed since stories emerged as an element in game design: How do you tell a story in games without removing agency from the player and thus hindering the procedural nature of digital games to flourish?⁹³

To approach this topic, it is necessary to first define two core concepts of storytelling in games, one being story itself, the other being the concept of fictional worlds. In their “essential introduction” to games studies “Understanding Video Games” Egenfeldt-Nielsen, Smith and Tosca describe story in the context of digital games as “[...] a scripted succession of events that the player has to perform in a specific order. [...] The events that make up the whole story/narrative/plot of this kind of games usually allow for minimal flexibility in the order of completion.”⁹⁴ Fictional worlds are defined as something that emerges out of a text. “A fictional world is an imaginary construct created by the descriptions of a text. Readers — and viewers, and players — infer that there is a make-believe universe in which the events they are reading about (or viewing or performing) make sense.”⁹⁵

This clarification is important for two reasons. First, among game designers it is common to use the term “narrative” to refer to any form of storytelling occurring within or in the surrounding of games. And second, “narrative” is also used to describe the fictional world a game’s procedures are situated in, while this world does not actually offer a narrative or story in the sense of a succession of events.

⁹³ The formation of game studies was accompanied by the rise of two concepts, which both aimed to describe the basic nature of games differently: Narratology analyzes games as stories or texts, while ludology tries to describe games based on their basic rules, their mechanics etc: Cf. Frasca, Gonzalo: “Ludology Meets Narratology: Similitude and Differences between (Video)Games and Narrative”, <https://ludology.typepad.com/weblog/articles/ludology.htm>, accessed on September 06, 2019.

⁹⁴ Egenfeldt-Nielsen, Simon/Smith, Jonas Heide/Tosca, Susana Pajares: *Understanding Video Games. The Essential Introduction*, New York/Abingdon: Routledge 2008, p. 172.

⁹⁵ Ibid., p. 173.

With this understanding of procedurality and narrative, it seems clear that they are based on two seemingly contradictory medial properties: interactivity and linearity. Nonetheless, this contradiction has led to plentiful experimentation throughout the history of digital games. The text adventure is the first genre that experimented mainly with storytelling and introduced the epic into digital games. Through the possibility of multi-linear stories, they expanded on the concept of traditional literary storytelling. Gundolf S. Freyermuth describes this expansion by focussing on the different sense of space and time in text adventures compared to linear literary fiction:

Their charm [the text adventures'] lay in the player's ability to navigate branching plots by answering text prompts or, later, by clicking on hyperlinks. With the text adventure, digital games started to form their very own modus of narration. In the beginning, it was shaped by literary world creation. Using the specific abilities of digital writing for multi-linearity, however, text-based adventures enhanced literary storytelling far beyond the possibilities of analog literature. Temporal linearity was replaced by a spatiality whose temporal dimension realized itself anew with every play-through.⁹⁶

Thus, every playthrough could offer players a new sequence of events, a new narrative to experience. Although at first realized only in text, which could not be changed, text adventures already played with procedurality by offering the player a choice of navigation. Later iterations greatly expanded on this, by replacing certain sections of text with others depending on the paths players took, by giving characters different personalities and reactions towards players and thus already foreshadowing all the core principles of later games, which made use of artificial intelligence to expand not only the narrative but also the world building and thus enhancing the experience of a fictional world for the players.

Additionally, the presentation of stories in games has borrowed a lot from film starting in the mid-1980s. Egenfeldt-Nielsen, Smith and Tosca analyze this in the context of the constant and fast improvement of graphical processing power:

Good graphics have translated into painstakingly [*sic*] detailed and sometimes beautiful worlds, while better AIs allow for more advanced response to player's action, including more interesting non-player characters and better simulations—all of these advances make the gameworld seem more alive, and each, in turn, changes the possibilities for storytelling.⁹⁷

While the influence of film has led foremost to a more visually impressive and cinematic presentation, the medium's influence has not greatly changed the way of storytelling in a structural sense. Cinematic games still used the same logic of branching narratives which was introduced by the text adventures and often focused even on completely linear storylines simply due to the extensive work and high costs it takes to create all the assets necessary for

⁹⁶ G. S. Freyermuth: Games | Game Design | Game Studies, p. 72.

⁹⁷ S. Egenfeldt-Nielsen/J. H. Smith/S. P. Tosca: Understanding Video Games, p. 170.

multi-linear storylines. The most prominent feature introduced by film to digital games might be the cutscene, film sequences that interrupt or stop the game for a while to present the players with necessary story events. One of the most prominent games making extensive use of cutscenes is the *METAL GEAR SOLID* series (first game released in 1998), which is not only full of cinematic references⁹⁸ but also uses long cinematic sequences to set the mood and tell the story within the games. Coming back to our definition of procedurality, it is understandable why narrative and interactivity is often seen as incompatible. In the case of cutscenes, any agency a player might have is removed completely.

Adventure games also looked up to films and have developed a compromise between cinematic presentation and player's choice. Games like *THE WALKING DEAD* (2012) combined the logic of branching narratives known from text adventures and the limited exploration of small rooms and scenes in their predecessors, point-and-click adventures, to add a cinematic experience on top. Games like this offer the player limited agency over the movement of the player character in confined scenes, but also do not fully remove it in sequences that feel like cutscenes. Instead they offer the player minimal choices at critical points within these scenes. This might be different possibilities on how to respond to another character choosing from predefined options, or having to make a quick decision within action sequences under time pressure. The multi-linearity of these games is extremely limited, but they are reflecting the feeling of agency to the player and do not remove it completely.

While the influence of film therefore mainly shaped the visual representation of digital games, the technological advances mentioned above have also led to the exploration of storytelling through the use of emergent gameplay. On the online magazine for digital games Gamasutra, Josh Bycer defines emergent gameplay as the result of an “[...] open-ended [design] to give the player enough options to be creative with.”⁹⁹ However, this does not mean to merely present players with a lot of options. Instead Bycer describes two conditions, which are necessary to create emergent gameplay.

⁹⁸ Most notably through its main character Solid Snake, which is a homage to the 1981 John Carpenter film “Escape from New York” and its main character Snake Plissken. Cf. Good, Owen S: “Metal Gear Solid wasn’t sued over Escape From New York ties because Kojima’s a ‘nice guy’”, in: POLYGON, October 28, 2015, <https://www.polygon.com/2015/10/28/9625556/metal-gear-solid-escape-from-new-york-lawsuit-kojima-john-carpenter>, accessed on September 05, 2019.

⁹⁹ Bycer, Josh: “Examining Emergent Gameplay”, in: GAMASUTRA, September 16, 2015, https://www.gamasutra.com/blogs/JoshBycer/20150916/253682/Examining_Emergent_Gameplay.php, accessed on September 06, 2019.

First, the mechanics and tools must be malleable to the point where someone can combine them in expected and unexpected ways. If you give the player 100 different options for solving a solution, but they have no connectivity between each other, then you've created 100 locked paths and not Emergent gameplay.

Second, the game's objectives (if any) must make allowances for and possibly reward the player for using Emergent gameplay strategies. Letting the player do what they want won't matter if the game only has one or two ways of beating it.¹⁰⁰

The possibilities of emergent gameplay are highlighted especially by a genre called "immersive sims." The origins of immersive sims can be found in a studio called Looking Glass Studios, which developed the *SYSTEM SHOCK* (first game released in 1994) and *THIEF: THE DARK PROJECT* (first game released in 1998) series in the 1990s. The core principle of these games was to present players with an objective and different tools which could be used to reach that objective. Although the goal was the same, the way players could approach things could vary in many ways. This was especially enhanced by the integration of AI which reacted to changing parameters in the game world. In *THIEF* the lighting of a scene could be influenced by extinguishing torches. This would make sneaking easier, but guards would be confused by this, might get suspicious or even light the torches again. Important for this kind of gameplay is that established rules are not changed, so the player can learn to rely on and combine them while playing through the game. Through this combination emergent gameplay arises. In recent years immersive sims have made a comeback most notable through the *DISHONORED* series (first game released in 2012) and the *PREY* (2017) reboot by Arcane Studios, which was established by former employees of Looking Glass Studios.

Immersive sims are important for the handling of narrative in games, because instead of trying to rely on predefined multi-linearity as many adventure games do, they focus on players driving the direction of a narrative. Depending on the player, a retelling of a playthrough of *THIEF* might be the story of a crazy chase through the level which ended in a fight or the story of sneaking through it without ever being seen, always staying in the shadows. And these are just two examples. Emergent gameplay leads to the creation of stories along the way. These add players' experiences to the overall fixed plot(s) of a game instead of competing with it(them). The possibility to influence the path enables players to connect to the story in a personal way, because they choose their approach on their own account and do not just follow a suggested path.

¹⁰⁰ Ibid.

Immersive sims are also interesting because they introduce the simulation concept of games like the aforementioned city-builders (for example PHARAOH) into shooters and action adventures, games that are traditionally more focussed on streamlined linear stories. It combines the personal first person perspective with complex simulated systems that the player has to work with and around. It invites experimentation to understand how things work in this world and what is necessary to do to reach an objective. While we are not aiming to create an immersive sim, this approach on game design presents us with tools to create a balance between the abstract modeling and personal exploration of governmentality through a simulation system with narrative elements. Like immersive sims, we can use the interplay between the descriptions of a fictional world (although we are basing our project on real-world examples it is still a fictional world as we are not trying to recreate a specific immigration office) and interlocking systems let stories arise from the gameplay itself.

3.2 Multiplayer

As we discussed earlier, a game, in essence, entails the simulation of system(s) which are composed of rules. But a simulation does not necessarily require an interactor. It can just be allowed to run for a period of time and its state can be observed. This is done every day to forecast weather events, assess military strategies or engineer new buildings. Their operators can modify governing variables to explore other options or observe relationships between components. Interactivity introduces the operator into the simulation as a new variable, an unknown, that is in itself the product of a calculating, understanding, creative brain. Game makers target this boundary between computer and human to create entertainment products. They do this by selectively choosing the rules of the systems they simulate, the context they provide and the affordances they allow in the games they make.

Multiplayer games, whether they are competitive or cooperative, augment the medium by the addition of new agents to the simulation, who are otherwise distinct from each other. Participants lack complete understanding of each other and thus have to observe, interpret, predict and react to one another within the simulation framework. This creates emergent entertainment and new forms of sociability. This was especially important in the early years of digital games, when computational power and software technology was still too limited to create games with sophisticated visuals or intricate artificial intelligence. Therefore, many early digital games were designed to be multiplayer games by plotting players against each

other, either in front of arcades or the home TV with the first home consoles. One of the first commercially successful digital games, PONG (1972), required two players to play.

This form of play is called co-op, standing for cooperation, although not all of these games, like PONG, required players to actually cooperate. Most early digital games, which offered a multiplayer option, were co-op games. This form of play was well suited for the dominance of the Arcades since the 1970s in US-America and also the first successful home consoles like the Atari 2600 and their successors like the Nintendo Entertainment System (NES).

However, at the same time since the early 1970s and in parallel to the rise of the text adventure, multiplayer games started to develop in another direction. Emerging in local networks and the first dial-up networks, the first Multi-User-Dungeons (MUDs) were created. MUDs offered players the possibility to communicate and interact with each other via text in real time. Often the MUDs were situated in a fictional setting with its own set of rules. The players created avatars for themselves, which would represent them in the game world. Gundolf S. Freyermuth tracks their origin back to two different developments in the context of storytelling in games:

Historically they have two roots: first, the text-based online games, which students and teachers programmed for university mainframes since the early seventies—for example, STAR TREK (1971), MAZE WAR (1974) or AVATAR (1977); and second, the analog roleplaying game Dungeons and Dragons—a combination of elements from war games, amateur theater and fantasy tales—that also had a significant influence on text-adventures.¹⁰¹

These MUDs were also a response to the restrictive nature of text adventures, which did not allow to modify the narrative of the game. MUDs explored the context of narrative in digital games further by allowing the player to develop and act out their own fantasies in a fictional setting. During the 1980s MUDs continued to thrive, and with HABITAT (1986), the first MUD with 2D graphics was released. The users were represented by a 2D avatar, which they controlled from a third-person perspective. The goal of the developers of HABITAT was to create a framework for a virtual community in cyberspace in which the world is completely governed by the players themselves. Following its launch, HABITAT was very chaotic as players exploited the games systems. This led to more restrictive rules to enable an enjoyable experience for everybody. Chip Morningstar and F. Randall Farmer, co-creators of HABITAT, describe their process in retrospective:

¹⁰¹ Gundolf S. Freyermuth: Games | Game Design | Game Studies, p. 74.

We had imposed very few rules on the world at the start. There was much debate among the players as to the form that Habitat society should take. At the core of much of the debate was an unresolved philosophical question: is an Avatar an extension of a human being (thus entitled to be treated as you would treat a real person) or a Pac-Man-like critter destined to die a thousand deaths or something else entirely? Is Habitat murder a crime? Should all weapons be banned? Or is it all "just a game"? To make a point, one of the players took to randomly shooting people as they roamed around. [...] We compromised by changing the system to allow thievery and gunplay only outside the city limits. The wilderness would be wild and dangerous while civilization would be orderly and safe.¹⁰²

The first Massive Multiplayer Online Roleplaying Games (MMORPGs) from the 1990s had similar problems and solutions, which makes HABITAT their earliest representative. It links the early MUDs and the immense online games that started to appear since the mid-2000s, most prominently WORLD OF WARCRAFT (2004). The world of MMORPGs has since then split into two groups, which mirror the core conflict of users exploiting the game's system to their own ends and the wish of the developers for everybody to have an enjoyable play session. WORLD OF WARCRAFT for example has lowered the entry barrier for new players since its initial release more and more. Not all players welcome this development, which lead more than once to online and in-game protests against changes.¹⁰³ In 2019, Activision Blizzard even released a separate version of the game called WORLD OF WARCRAFT CLASSIC (2019), which is a reboot of the original game's version before its first expansion THE BURNING CRUSADE (2007). Other games like EVE ONLINE (2003) and ALBION ONLINE (2017) completely focus on player-driven economies and content and fully embrace the chaotic nature of letting human players organize themselves.¹⁰⁴

These aspects of multiplayer gaming surfacing within MUDs and later MMORPGs highlight a complex power dynamic within the relationships between creators and players and the players among themselves. Through their simulation of a fictional world, in which players are placing their avatars and thus are able to create a personal identity, the emergence of highly involved game communities in MMORPGs is common and one of the central aspects attracting players to games of this genre. Game communities are especially interesting, because they tend to expand on the game's rule sets by creating and imposing their own

¹⁰² Morningstar, Chip/Farmer, F. Randall: "The Lessons of Lucasfilm's Habitat", in: Michael Benedikt (Ed.), *Cyberspace: First Steps*, Cambridge/London: The MIT Press 1992, pp. 273-302, here pp. 289-290.

¹⁰³ Cf. Andrews, Scott: WoW Archivist: "Class protest and the Million Gnome March", in: ENGADGET, August 10, 2014, <https://www.engadget.com/2014/10/08/wow-archivist-class-protests-and-the-million-gnome-march/>, accessed on September 09, 2019.

¹⁰⁴ Cf. Messner, Steven: "Here are EVE Online's greatest stories", in: PC GAMER, May 07, 2018, <https://www.pcgamer.com/eve-online-stories/>, accessed on September 09, 2019.

regulations and interpretations on them. Egenfeldt-Nielsen, Smith and Tosca define them accordingly:

Game communities (within the game): this refers to the relations between players as afforded by the game, as members of a team, for instance, who communicate to arrive at the best strategy and align their movement. Such relationships are not always sufficient in current video games, so players extend these communications with informal rules, extra tools, and places to relate beyond the game, such as websites.¹⁰⁵

But these relationships do not emerge completely free from outside influence, although they do not necessarily need explicit encouragement. Most MMORPGs and multiplayer games suggest the forming of specific game communities through the design of the game's systems. These groups are called clans or guilds in most cases. They arise not only in games that offer a specific ingame function for this form of organisation, but also in those games in which their existence simply enhances the gameplay experience. A good example of this would be early first person shooters like QUAKE (1996) and later COUNTER-STRIKE (2000). In these games clans first organized through chats, voice chats and websites outside of the game before their successors included those functionalities within the games themselves.

Games that offer complex fictional worlds to play within, like most MMORPGs, suggest the formation of specific player groups not only through the game systems but also the game's narrative and the fictional world itself. By forcing players to choose from different factions for example, the game suggests to form groups with other players from the same faction to pursue common goals. Carly A. Kocurek describes this phenomenon with a general example and expanding further on it: "[...] if you choose to play as a goblin, you would be most likely to interact with other goblins. Alternately, different factions may, by design, have different skill sets, thereby encouraging players to seek out others with different skill sets."¹⁰⁶

Multiplayer in digital games is therefore characterized by the interplay between game systems designed to enable a specific form of behavior in the players, and the players' response to these game systems. The interesting part for both game creators and players in this relationship is the unpredictability of its result. In the previous chapter, we analyzed the concepts of procedurality and interactivity as two of the core principles of digital games, resulting at best in emergent gameplay which was not hardcoded into the game. In

¹⁰⁵ Simon Egenfeldt-Nielsen et al.: Understanding Video Games, p. 152.

¹⁰⁶ Kocurek, Carly A.: "Community", in: Mark J. P. Wolf/Bernard Perron (Eds.), *The Routledge Companion to Video Game Studies*, New York/London: Routledge 2014, pp. 364-372, here p. 366.

multiplayer titles this is extended by human players. Each new player adds a new agent to the simulation, resulting in more complex possibilities of interaction.

It is exactly this interplay that can be used in the exploration of governmentality in a simulation game setting. While we are aiming to present players with a specific system, we are not trying to enforce a very specific way of playing the game, but rather count on the emergent behaviors common in multiplayer games. In order to instill this form of behavior, it is necessary to define clear goals together with consistent rules and systems players can use or exploit to reach their goals. As we are intentionally designing our game to be played in the social setting of Twitch.tv, many technical requirements, like the chat, are already in place. This context and virtual space can not only be used to watch other people play, but also interact with the game and a social network that formed around it. Kocurek describes this as social activities arising out of originally gameplay focused groups:

While these formal and informal groups ostensibly have gameplay as a goal, they often participate in other social activities and may provide vital social support to one another, as evidenced by examples of in-game weddings and funerals held in recognition of out-of-game events [...]. These types of events demonstrate the extent to which game communities are analogous to out-of-game communities and meet the social needs of their participants.¹⁰⁷

3.3 Audience Gaming

Since the early 2000s, internet service providers have been steadily expanding their network infrastructures to accommodate the growing demand for fast and stable internet connections. As the network expanded and the technology improved, internet companies and regular businesses alike have continuously contributed to the ever-growing expansion of media-filled websites, file sharing services and web-gaming platforms. According to a report prepared by Akamai, one of the largest network providers in the world, 50 countries and regions had already surpassed the fifty-percent barrier for broadband access for their citizens by 2010.¹⁰⁸ By the end of 2014, about sixty percent of the whole world had an internet connection faster than four megabits per second.¹⁰⁹ Large bandwidth mass internet access led to the rise of

¹⁰⁷ Ibid.

¹⁰⁸ Cf. N. N.: "The State of the Internet (Volume 3, Number 1), 1st Quarter, 2010 Report", <https://www.akamai.com/us/en/multimedia/documents/state-of-the-internet/akamai-q1-2010-state-of-the-internet-connectivity-report.pdf>, accessed on September 22, 2019, p. 18.

¹⁰⁹ Cf. N. N.: "akamai's [state of the internet] (Volume 7, Number 4), 4th Quarter, 2014 Report", <https://www.akamai.com/us/en/multimedia/documents/state-of-the-internet/akamai-state-of-the-internet-report-q4-2014.pdf>, accessed September 22, 2019, p. 20.

video sharing websites such as YouTube, where hours of video footage is uploaded every minute of every day.¹¹⁰

As YouTube's user base matured, a large community of gamers with a diverse set of interests also made it their home. Every day they upload their memorable gaming moments to share them with their friends and followers. Speedrunners show videos of their countless trials and eventual success to prove their hard work and claim the title for the record they are attempting to break. Commentators and critics share their views on a particular game and give advice to potential buyers. E-sports channels provide a catalogue of past tournaments. Finally, there are those who play to tell a story, just to chat, to show how it is done or just to play along. Over time, this last group turned an iconic expression into a genre name: Let's play.

Let's Play videos are recordings of gameplay sessions, generally accompanied by the player's reactions and commentary through voice and webcam recordings. Most creators start with an implicit or an explicit goal pertaining to the game to guide their overall actions. Most videos do not cover the entirety of the session. Rather, they are edited and cut together to create an entertaining clip, from which the dull or repetitive parts are removed. Scully-Blaker, Begy, Consalvo and Ganzon call this "YouTube-worthy" play, that is, gameplay that "involves not only talent, but also the use of a number of technological and social structures that convey competitive advantage."¹¹¹ This is a form of gameplay recording that aims to entertain either by form through editing, effects, commentary, or its rare and extraordinary nature.

In parallel to YouTube's ever-growing success, the 2010s saw the rise of real-time video streaming services. Initially these were designed for adult entertainment and lifecasting, where users could share their lives online in real time. One of the pioneers in this field was a website called Justin.tv, which later split into its more successful gaming counterpart Twitch.tv in 2011. Twitch.tv, or more commonly known as just "Twitch", is a website where people can stream their gameplay sessions in real time with or without additions like face-cams, banners, automated greeters and more. It hosts e-sports events, speedrunning sessions, personal streams and talk-shows on games and game-related content. Patrons of these streams can

¹¹⁰ Cf. Oreskovic, Alexei: "Exclusive: YouTube hits 4 billion daily video views", in: Reuters.com, January 23, 2012, <https://www.reuters.com/article/us-google-youtube-idUSTRE80M0TS20120123>, accessed on September 22, 2019.

¹¹¹ Scully-Blaker, Rainforest/Begy, Jason/Consalvo, Mia/Ganzon, Sarah Christina: "Playing along and playing for on Twitch: Livestreaming from tandem play to performance", in: Bui, Tung (Ed.), Proceedings of the 50th Hawaii International Conference on System Sciences, ScholarSpace / AIS Electronic Library 2017, pp. 2026-2035, here p. 2027.

watch and interact with the streamer directly, comment on their gaming session and even donate money to support them financially.

What sets the Twitch streams apart from YouTube Let's Plays is the real-time factor. YouTube creators have the ability to capture and edit their footage to make their broadcasts entertaining before the material is uploaded online. Twitch streamers on the other hand are playing live for an audience. This involves all the typical stages of a gaming session from starting up to loading a level. They have to keep things entertaining even when the game is not providing interesting material to do so or technical problems prevent it. This fact incentivizes broadcasters to choose games that have less downtime and more emergent gameplay.

Twitch channels allow user interaction through a chat box that is placed next to the video stream. Using the chat box, people who watch the streamer can voice their opinions, ask questions or generally react to the events on the stream. As the number of viewers rises, direct communication between the audience and the performer normally reduces. Instead it turns into a fast-flowing reaction stream akin to a stadium. In these types of streams, viewers prefer emoticons or repeating their sentences in all capital letters to gain visibility. Twitch also provides developers with software development kits to create more advanced interaction facilities. Streamers use these for example to ask for suggestions on how to behave within a game, run straw polls to make decisions and receive donations, which are then usually accompanied by special messages that show on the stream. This enables viewers to create a form of special interaction with the streamer.

Furthermore, game developers use development kits provided by the platforms themselves to integrate novel features and new gameplay mechanics into their games. The 2D action platformer game **DEAD CELLS** (2017) by Motion Twin is one of the prime examples of Twitch integration. The game features a so-called "streamer mode", which enables the audience to participate in the game. If the player reaches the end of a level the game will ask the viewers to vote where the player should go next. This is done via a specific text input in the Twitch chat. As soon as the decision is made the game blocks the path to the unchosen level. The audience can also vote for whether certain chests will be helpful or harmful to the player and which improvements will be available through certain pick up items.

Another example showcasing this design approach is the multiplayer platform racing game **ULTIMATE CHICKEN HORSE** (2016) by Clever Endeavour. Here the viewers can name items in

the chat to supply the players with resources to use during the game. In this case, the audience becomes a singular agent in the game since the average value of their votes is used ingame. But not all games experimenting with Twitch integration allow that level of user interaction. The turn-based horror strategy game FEAR EQUATION (2016) by Screwfly Studios uses only the audience members' names for ingame characters.

Playing a game in front of other people is a different experience for the player. Anyone who played a challenging game under the gaze of another person would feel the extra pressure of failure and the joy of success. But there is more to this than just pressure. Many players enjoy proving their skills or introducing their favorite game to other players. So when they are being watched, players make different play decisions, take on harder challenges or choose different paths that highlight what they think are the best parts of a game. Play becomes performance. A study by Holin Lin and Chuen-Tsai Sun done on arcade attendees playing dancing games like the DANCE DANCE REVOLUTION series (first game released in 1998) and PARA PARA PARADISE (2000) in public arcades showed that players show awareness of onlookers, even to the extent of expert players choosing to play at prime times to have the biggest audience. Some players go beyond the mechanics of the gameplay to put on a more interesting show for the audience, for example by using hand gestures when the game is played with the feet, in the case of DANCE DANCE REVOLUTION.¹¹²

Streaming gameplay online also affects players in a similar manner. They spend more time exploring, talk about their play decisions, tell life anecdotes that relate to the game and try to show off their skills. In their study on different forms of play on Twitch, Scully-Blaker, Begy, Consalvo and Ganzon show that even regular players, when asked to play on a stream, observe changes to their play experience. This phenomenon happens even if it's their first time streaming or if the audience is really small.¹¹³ One bigger benefit of stream play appears to be the ability to crowdsource information about the game. Some streamers ask their audiences about what is coming ahead in the game, for tips on how to solve a particular puzzle they have trouble with, or which path they should take next. In response, members of the audience knowledgeable with the game help the streamer or even collectively 'troll' them by giving them misleading information to become part of the entertainment.

¹¹² Cf. Lin, Holin/Sun, Chuen-Tsai: "The Role of Onlookers in Arcade Gaming: Frame Analysis of Public Behaviours". in: *Convergence: The International Journal of Research into New Media Technologies* 17(2) (2011), pp. 125-137, here p. 135.

¹¹³ Cf. R. Scully-Blaker/J. Begy/M. Consalvo/S. C. Ganzon: Playing along and playing for on Twitch, pp. 2030-2031.

Exactly this form of alternating communication makes streaming interesting in the context of exploring governmentality in a digital game. First of all, the power distribution between streamer and viewers is unbalanced, with streamers having total technical control over their stream and chat. They can kick and ban users at will and generally hold the authority over the stream. However, they are also dependent on their viewers and their goodwill. If streamers do not treat their audience with respect, it may leave and in the case of professional streamers even endanger their source of income by doing so. Other forms of disobedience are also possible. Although not completely the same, this structure has certain similarities with the relationship between a government and the citizens of a state.

4. Simulating the Administration of Migration and Integration

4.1 Adapting Real-World Processes into Game Systems

When creating games which are heavily influenced or based on real-world systems and processes, a common problem is that reality rarely presents itself as an engaging, consistent and balanced system. On the contrary, real life has the tendency to be complex and contradicting, with people making different sense out of the same events, finding different ways of explaining them and in general formulating what we like to refer to as “reality”. To put it to an extreme, one could say: Real life presents itself as many experiences entangled into an ever-growing network of things, events and nodes. Digital games on the other hand are based on restriction, abstraction and the focus of certain small interlinked processes which form repeatable and controllable loops to enable meaningful player actions. In his 2017 talk **30 THINGS I HATE ABOUT YOUR GAME PITCH** at the Game Developer Conference, game designer Brian Upton mentions realism as a guideline for game design accordingly: “Don’t use realism as a way to excuse elements of your design.” He further goes on saying that it only make sense for hardcore simulations to closely model real life. However, most games would not be set in the real world anyway, thus making it completely meaningless to enforce real-world rules onto them.

Unfortunately, he does not explain what he understands as a hardcore simulation in this context, but it is safe to assume that he means games which aim to model certain real-world processes down to the smallest detail. This approach to game design can specifically be found in games that focus on physically precise simulation of certain actions, like for example racing games or flight simulators. Some strategy games might also be considered hardcore simulations if they are constructed from a lot of complex and intertwined systems players have to observe, control and manage. A good example is the aforementioned **STELLARIS**.

However, this does not solve the above-mentioned problem for our aim to thematize migration and integration by simulating the inner workings of an immigration office. While we are basing our design on real-world observations and theories, we are not trying to create a hardcore simulation which emulates every aspect of life in an office. Rather we are interested by the juxtapositions of demands, rules and regulations of different political, cultural and social agents, which comes to the forefront here and would allow us to access to emergence

of governmentality in this setting. A hardcore simulation would value details over the general, instead of allowing people to imagine the details by experiencing the simulation of the general.

William Uricchio explores this relationship between the specific and the general in his article “Simulation, History and Computer Games” as one of the most promising tensions in digital games as a genre. He uses the example of GRAND PRIX LEGENDS (1998), a truly hardcore Formula One racing simulation, to describe the paradoxical relationship between the wish of the game designers to create an historically authentic racing simulation and a game’s necessity of agency which will always ultimately deviate from a classical notion of historical fact or truth. “[...] the tension between the specific and the speculative gives this genre its power, and speaks directly to Huizinga’s notion of play [...]. Indeed, the richer the specific historical detail, the more profound and pleasurable the play with the speculative.”¹¹⁴ While he acknowledges the use of (historical) detail, he later continues: “Play emerges in the space between the constraint of detail and the exhilaration of improvisation.”¹¹⁵ Although Uricchio approaches his analysis from a player perspective, this insight is also interesting for designers aiming to create experiences based on real-world systems because he recognizes the fascination of the fact as an exciting thing to explore within a system that will ultimately deviate from whatever thing is seen as such fact. This creates the possibility for the game designer to draw attention to specific parts of a system by intentionally changing their real-world counterparts.

In their exploration of the relationship of journalism and games called “Newsgames”, Ian Bogost, Simon Ferrari, and Bobby Schweizer offer another approach to this problem. They start by asking what topic and what kind of topics games are suited to address in the first place. “[...] games are better at depicting the general than they are at the particular.”¹¹⁶ Their most compelling example is that of CUTTHROAT CAPITALISM (2009), a webgame that accompanied an article by the same name about the economic background of piracy off the coast of Somalia.¹¹⁷ Unlike many other news stories about this topic, CUTTHROAT CAPITALISM does not focus on a specific incident or story, but rather explores the economic profitability of piracy

¹¹⁴ Uricchio, William: “Simulation, History, and Computer Games”, in: Joost Raessens/Jeffrey Goldstein (Ed.), *Handbook of Computer Game Studies*, Cambridge/London: The MIT Press 2005, pp. 327-338, here p. 329.

¹¹⁵ Ibid., p. 330.

¹¹⁶ Bogost, Ian/Ferrari, Simon/Schweizer, Bobby: *Newsgames. Journalism at Play*, Cambridge/London: The MIT Press 2010, p. 179.

¹¹⁷ Cf. Carney, Scott: “Cutthroat Capitalism. An Economic Analysis of the Somali Pirate Business Model”, in: Wired, June 22, 2009, <https://www.wired.com/2009/06/cutthroat-capitalism/>, accessed on September 28, 2019.

in a procedural manner by letting readers (or players) experiment with the system the articles' research had described previously.¹¹⁸

Bogost, Ferrari and Schweizer continue later: "Games offer journalists an opportunity to stop short of the final rendering of a typical news story, and instead to share the raw behaviors and dynamics that describe a situation as the journalistic content."¹¹⁹ While the authors talk about the difference between a news story, which tells a specific tale, and a newsgame, which exposes the inner workings of a system, it is their usage of the phrase "final rendering" that is important for us here. Expanding on this, for a journalistic game even the system described through a game should not be a final rendering, but rather a first access. It is a way to engage with a topic in a playful manner to instill further discourse and discussion.

Similar to CUTTHROAT CAPITALISM we are aiming to create a game to approach migration in the general sense, not the specific. In the introduction to Bogost's book "Persuasive Games" he further argues that the true rhetoric power of video games lies in their procedural nature and not in their content. He calls this "procedural rhetorics" and references Gonzalo Frasca, who offers an applicable description of what an author (or designer) of a simulation game does in creating its systems.¹²⁰

[...] simulation authors do not represent a particular event, but a set of potential events. Because of this, they have to think about their objects as systems and consider which are the laws that rule their behaviors. In a similar way, people who interpret simulations create a mental model of it by inferring the rules that govern it. [...] the goal of the player would be to analyze, contest and revise the model's rules according to his personal ideas and beliefs.¹²¹

4.2 Reducing Complexity

Thus, the first necessary step in creating a simulation based on real-word processes is the reduction of complexity to isolate the necessary elements that we wish the player to "analyze, context and revise," like Frasca put it. In order to do this, a guiding principle is needed. Something that guides the designer's decisions in selecting different aspects of a real-word system while excluding others. In our case, this principle is governmentality. As we discussed above, we understand governmentality as a form of power, which is used to control a

¹¹⁸ Cf. I. Bogost/S. Ferrari/B. Schweizer: Newsgames, pp. 3-5.

¹¹⁹ Ibid., p. 179.

¹²⁰ Cf. Bogost, Ian: *Persuasive Games. The Expressive Power of Videogames*, Cambridge/London: The MIT Press 2007, p. 64.

¹²¹ Frasca, Gonzalo: Videogames of the Oppressed. Unpublished Master Thesis, Atlanta 2001, <https://ludology.typepad.com/weblog/articles/thesis/FrascaThesisVideogames.pdf>, accessed on the 27th of September, p. 113.

population through so-called “apparatuses of security”. These manifest themselves in “[...] institutions, procedures, analyses and reflections, [...] calculations and tactics [...].”¹²² We also looked into the different forms these “apparatuses of security” can take on and how migrants interact with them and have in our exploration of this relationship already started the first necessary reduction: We focused mainly on one of these apparatuses, namely the institution of the immigration office. This focus is justified by the central position the immigration office takes in the migration process as soon as migrants have reached their target country. It is unavoidable for them to visit this administration and make themselves a target of their procedures. This first reduction provides us with the simulation’s major setting, the stage on which all further actions and events will be presented, interacted with and played out.

Next, it is necessary to define the different agents the simulation should represent. Two are clear from the very beginning: On the one hand we will need migrants, although at this point, it is not clear what their specific attributes will be. On the other hand, there will be the player or players. In this case there are multiple players, consisting of the streamer, leading the play sessions and having in general the most control over the game’s system, and the stream’s viewers, who will take on the roles of the migrants. However, as we are still engaged with the reduction of complexity, we will assume for now that the migrants are simply computer-controlled agents and only one player exists in the system, the streamer.

Before we select the remaining agents, it is necessary to clarify the form of gameplay we are actually aiming for. After all, simulations can take very different shapes and forms, from strategy to action to racing. Nearly every genre can embrace the concept of simulation as a core element as described in chapter 3.1 with the case of the immersive sims. In our case, we are aiming to create a management simulation, in which players are tasked with running an immigration office. The player will be presented with a bird’s eye overview of such an office, whose employees they will have to manage in order to process requests by migrants in an orderly and timely manner. The requests will be processed by the office workers, after which they will present their findings to the player, who will have to decide whether to grant the migrants’ requests or deny them. The player will have to react to the different political agents which will make different and sometimes contradictory demands. If players comply with an agent they will be rewarded, if they do not they will be punished by an aggravation of

¹²² M. Foucault: Governmentality, p. 102.

demands. This will ultimately result in the need to balance the different demands of these agents against each other to ensure a continuously functioning immigration office. The game's time will be structured in days or cycles.¹²³ Each cycle starts with players having to assign stations to their office workers and checking the current demands of the political agents. As soon as players start the day, the migrants will start coming into the office and the office workers will process their request and present players with their findings. A day has a fixed amount of time and as soon as this time has run out, the office closes and the game presents the player with the results of the day.

A few agents were already mentioned, such as the office workers, but in order to select the political agents, it is necessary to go back to the analysis of different migration theories and approaches to integration and their implementation in the inner functionalities of state administrations, which we conducted in the first two chapters. Our analysis of the different governmental institutions and procedures of the Federal Republic of Germany notably provides us with several important actors for the design of political agents.

Apart from the immigration office, which for us takes less the role of an agent and rather that of a stage and setting as stated above, the most important of these actors are the "Bund" (the federal state), the different "Länder" the "Bund" consists of (the states) and the "Kommunen" (the communes). On top of this, there would be the many states the migrants departed from, which can also be active parties in the process of migration as we have seen previously in the cases of Turkey and Mexico. As these countries are not always involved in the whole process, but rather become active in certain specific circumstances, we will exclude them from the game and focus more on the agents within the receiving state. In continuation of the practice set in chapter 2, we will continue referring to them by their German names.

As previously described, "Bund", "Länder" and "Kommunen" are all taking on different responsibilities in the migration and integration process. As we are situating our simulation in the immigration office, which is placed under direct control of the "Kommunen", it is this political instance that is the most important for us. They hold the responsibility to shape laws into reality, and the immigration office is one of their administrations tasked with doing so. Therefore, the "Kommunen," or in our case the specific "Kommune" our game is set in, has a direct influence on the internal organization of the office. The "Länder" are less involved in

¹²³ At this point we think of them rather as abstract time units than an actual representation of a real life day.

the migration process, but can influence it through specific policies directly linked to integration efforts targeting for example the education system, which is handled by the “Länder”. Apart from that they are also deciding what responsibilities the “Kommunen” have to take on in general, with migration and integration being just one part of it. In the Federal Republic of Germany the constant growth of the welfare state has led to the “Länder” constantly shifting more and more responsibilities to the “Kommunen”, thus stressing their budget.¹²⁴ This directly influences the funds the “Kommunen” have available for these responsibilities. And finally, the “Bund” is formulating the actual laws and regulations of migration that the “Kommunen” are then supposed to execute. On top of that, the “Bund” controls the central agency responsible for handling all issues concerning migration policies, the BAMF (Federal Office for Migration and Refugees). The simplified description of these agents and their relationship among themselves can be further broken down into the following three statements:

- The “Bund” is issuing laws of migration.
- The “Länder” are controlling the money the “Kommunen” have available.
- The “Kommunen” are tasked with executing the laws of migration by the “Bund” with the money available from the “Länder”.

This is the moment where our game system is ultimately changing its real-world model. In reality it is much more interconnected, but in order to create a system which can be easily explained to the player, it is necessary to first break it down to a simple trickle-down system to expose the very basic notion of dependencies the player has to deal with during play.

4.3 Defining Details and Dependencies

With this basic system in place we can move on to the next step, which will define the above-developed dependencies in more detail. For this, the instance of the “Bund” will not be touched. Instead of adding complexity to it, it will merely stand in as a representation of the general implementation of migration policies of the system the game is set in. As we are using the Federal Republic of Germany as a template, we generally assume the game to be set in a representative democracy, in which policies are decided upon by a group of elected officials.

¹²⁴ Cf. K. Hoesch: *Migration und Integration. Eine Einführung*, p. 308.

Migration and integration policies can therefore take different shapes ranging from restrictive to open. For the player these will be accessible as starting frameworks for each play session. This means that a game might start with a very open approach but gradually changes over time. A good example of an incentive that might be issued by the “Bund” via law could for example be the handling of dual citizenship, which is technically not allowed in Germany but tolerated under certain circumstances. This could be one of the basic laws issued by the bund, which then is interpreted by the “Länder” and “Kommunen” and through this made accessible to the player. However, the player will not be able to influence the instance of the “Bund” in any way. This decision is based on the immigration offices being mainly executive offices of the “Kommunen”, which do not directly influence the policies of the “Bund”. Multiple “Kommunen” and their decisions could technically have an impact on certain political decisions, but as we are only giving the player control over one office in one of these “Kommunen,” it does not make sense to suggest a possible influence on the “Bund” itself.

With the “Bund” being a rather abstract agent, the “Länder” and “Kommunen” will be represented more actively as the instances that directly demand a certain behavior of the player. We have been using the plural for these two agents so far. In the game there will only be one “Land” and one “Kommune” influencing the player. This is another reduction, which makes sense as every immigration office can only be administered by one “Kommune” and only be situated in one “Land”. Of course there are others bordering these and their everyday politics could potentially influence each others’ behavior, but this would add too many different agents with subtle differences, which are hard to communicate to players, into the simulation.

But before we can define their dependencies and affordances, we have to set the basic properties of our migrant agents. These properties will ultimately be investigated by the office workers, and players will have to decide whether to grant or deny requests based on the results of these investigations, as they either satisfy or fail to satisfy the demands of the “Länder” and the “Kommunen”. First we must create a list of migrant types. These are based on a general distinction between worker types made by the BAMF, which distinguishes between “qualified professionals, highly qualified workers, researchers, self-employed persons, jobseekers and intra-corporate transfer”.¹²⁵ We also added the type “family reunion”

¹²⁵ Federal Office for Migration and Refugees: “Citizens of third countries”, <http://www.bamf.de/EN/Migration/Arbeiten/BuergerDrittstaat/buerger-drittstaat>

to account for those people arriving mainly to be with their families. Refuge or asylum is not present here because applications of asylum are not handled by the immigration office in Germany but rather by local offices of the BAMF.¹²⁶ Additionally each migrant will have a goal. Based on the three major areas handled by the immigration offices, these will be the pursuit of either a residence permit, a settlement permit or a request for naturalization. The residence permit handles the right to stay in the country and get work, but it is always time limited. Settlement permits are similar, but they are permanent. Naturalization describes the formal adoption of a country's citizenship.¹²⁷

These migrant types and goals are roughly based on the migration theories analyzed in chapter 1. The types draw from the notion that most migration is an economic effort recognizing the fact that even if migrants did not migrate because of economic reasons, the question of income and how they will support themselves in another country will become central. Especially for the target country this question plays a major role to successfully integrate migrants into society. The family reunion is a small step to recognize other forms of migration, which were discussed in this chapter, and to recognize the important role families can play in this context. As we set our simulation in a fictional setting, we excluded ethnicity and specific countries of origin from playing a role here. We will discuss these factors in the next subchapter "Implementing the Audience".

In addition to the migrant types and goals, we added a few more parameters, which deal with the social and cultural backgrounds of the migrants. These will mirror the financial status, criminal record, educational level and language skills of the migrants. These parameters are partly based on the different forms of capital described by Pierre Bourdieu, as mentioned in chapter 2.5, which determine people's ability to act within a society. Instead of the aforementioned social capital, we base the education parameter on cultural capital and

node.html;jsessionid=49159AAA37EFC982D64247988D03B35B.1_cid359, accessed on September 28, 2019. For the different categories which we adapted into migrant types check the menu bar of this section on the left.

¹²⁶ We decided to exclude the topic of refuge at this point also because it would have made the research of multitude of other processes necessary. Although these are connected to our focus on the immigration office this would have added simply too much to handle at this point. However, nothing prevents us to integrate refuge and asylum as an additional topic at a later point into our simulation framework. Even if this process is generally handled by another administration in the Federal Republic of Germany, it could be integrated into our model of an immigration office which simply would be expanded by a section overseeing the responsibilities of the local BAMF offices.

¹²⁷ Cf. Federal Ministry of the Interior/Federal Office for Migration and Refugees: "Welcome to Germany. Information for Immigrants", August 2014, https://www.bmi.bund.de/SharedDocs/downloads/EN/publikationen/Willkommen_in_Deutschland_en.pdf?__blob=publicationFile, accessed on September 28, 2019, pp. 27-28 & 32.

finance on financial capital. Cultural capital describes an individual's access to specific types of knowledge, education and their intellect, which confers their social status. Financial capital on the other hand is simply the accessibility of money and resources. This can be either through personal possession or through social connections that enable the use of such capital.

With the basic migrant properties set up, we can now talk about the last three agents: The “Land”, the “Kommune” and finally the office workers. As mentioned before the influence of the “Land” is limited to the control of money. But it can also give the “Kommune” more or less freedom in handling its affairs. In our case, this will be represented with the “Land” demanding from the “Kommune” and thus from the player to especially consider specific types of migrants for their requests. This is based on the notion that the Federal Republic of Germany for example often has problems filling positions which demand qualified professionals: In recent political discussion, the situation of caregivers was for example often debated.¹²⁸ They will also demand that these migrants fulfill certain requirements depending on the goal they are striving for (residence, settlement or naturalization). These requirements will refer to the social and cultural parameters of the migrants.

The “Kommune” will behave similarly, but as it is representing a more local form of government its demands are only targeted towards the migrants' social and cultural requirements. This means that the “Kommune” is communicating its notion of continuous stability to players through these demands. This is best illustrated with the “criminal record” parameter. An already stable “Kommune” will not tolerate any form of criminal record in applicants, while a “Kommune” really looking for more financial resources might be more lenient in this way. It is a crude example and at least by moral standards far from reality, as criminal records are taken very seriously in the process of applying for any form of permit in the context of migration. But it highlights the flexibility of governmentality which we are aiming to highlight in this simulation.

Last, we have the office workers. These will stand in as a representation of the so-called “public opinion”. Every morning the player will be confronted with a different news cover story, which might describe migration in either a negative, neutral or positive way referring to migrant types, their goals or their social and cultural parameters. Office workers will also have

¹²⁸ Cf. N. N.: “Suche nach Pflegekräften führt Jens Spahn nach Mexiko”, in: Sueddeutsche.de, September 21, 2019, <https://www.sueddeutsche.de/karriere/arbeitsmarkt-suche-nach-pflegekraeften-fuehrt-jens-spahn-nach-mexiko-dpa.urn-newsml-dpa-com-20090101-190921-99-969523>, accessed on September 28, 2019.

an education level, which can be raised by players by investing in the further education of their workers. Depending on the education level and the nature of the news story, worker motivation and morale will change and influence their efficiency. To compensate a bad morale, the player will have to react to the migrant properties described in the news stories so the workers feel safe and respected. This is a simple system to acknowledge that the reality of governmental systems is not alone made within the administrative apparatus.

4.4 Implementing the Audience

In the last two chapters, we have intentionally ignored the implementation of the audience in the game systems. With the main structure of the simulation set up, it is time to explore how the audience can be involved in the game by making use of the direct communication that is possible between streamers and their audience on platforms like Twitch. One of the most important tasks for a game designer is to balance the game's systems in order to create an enjoyable play experience. In his book "The Art of Game Design" Jesse Schell argues that balancing ensures fairness. "One quality that players universally seek in games is fairness. Players want to feel that the forces working against them do not have an advantage that will make them impossible to defeat."¹²⁹

In the previous chapter we have already touched on the aspect of the relationship of the different agents like the "Land" and the "Kommune" among themselves and how they player, e.g. the streamer, will have to behave to balance their needs to succeed. With the implementation of audience members controlling the behavior of single migrants, this system is becoming even more complex. Additionally, the power balance between the streamer and the audience members will be asymmetrical. Jesse Schell differentiates among others between "symmetrical" and "asymmetrical games". In symmetrical games the balancing distributes possibilities to act equally between the different agents capable of acting within the game's system. In an asymmetrical game, different agents are provided with different possibilities to act, which creates a more complex and diverse gameplay.¹³⁰ While our game design was already asymmetrical without the audience as players of the migrant agents, it has now also become intentionally unfair. While the streamer will hold the power to decide over

¹²⁹ Schell, Jesse: *The Art of Game Design. A Book of Lenses*, Boca Raton/London/New York: CRC Press 2015, p. 203.

¹³⁰ Cf. ibid.

the success or failure of the audience, the audience will not have any agency to influence the streamer ingame. The reason for this decision is to have the audience discuss perceived unfairness of the streamer in the chat and thus thematize its experience.

In detail, the audience migrant system will work as follows. After the game is set up by the streamer, audience members will have the possibility to opt to take on the role of a migrant in the game. This will be done via a separate web client which can be loaded in parallel to the stream by the audience members. Similar to party games like *DRAWFUL 2* (2016) or *QUIPLASH* (2015) by Jackbox Games, the audience will be able to opt into the streamer's game session via a code displayed on the screen. As soon as they have opted in, they will be presented with a randomly generated migrant character and its parameters. These are the social and cultural parameters already mentioned in the previous subchapter (e.g. financial status, criminal record, educational level, language skills) with one addition: happiness. There are also given a specific goal to achieve, e.g. getting a residence or settlement permit or achieve naturalization, and the amount of cycles/days they have time to achieve this goal.

The audience members can now customize their migrant character by giving him a portrait, name and a brief background story. This does not influence the way the game systems interpret the migrant but adds another layer for the interplay between streamer and audience. It is based on practices in roleplaying games in which the creation of a personal character strengthens the bond between player and character. It is also easy to expand on this system later on and add even more possibilities of customization.

After the streamer has started a cycle, the audience members are able to see what requirements the "Land" has issued for their specific goal and have to check if the parameters of their migrant is matching these requirements, which they will never do right from the beginning. To improve the parameters they have to spend time and money. These two resources will refresh at the beginning of each cycle. The available amount of time always stays the same each cycle, and money can be saved and is dependent on the financial status of the migrant character. During each cycle the audience can decide if they want to apply for their permit now or wait another cycle to improve their parameters further. However, if they pass the deadline they will be excluded from the game session. This will also have the consequence that they are banned from the regular Twitch chat for a while and are being put in a separate chat lobby within the web client. All audience members that were unsuccessful in reaching their goal can talk to each other without the streamer or the rest of the audience

being able to react to what they are saying. Their chat will however be featured as part of the ingame UI so everybody else can still read along. If audience members reach their goal on the other hand they are rewarded by having their name featured in the stream and getting some chat privileges for a while. These privileges will have to be set up and defined by the streamer beforehand.

4.5 Exploring Governmentality

With the integration of the audience we have now created the central conflict that is at the core of the “apparatuses of security” described by Michel Foucault. Governmental institutions are plotted to control the citizens by enforcing certain rules. However, these rules are hardly consistent, but rather follow a similar principle. In our case this is the organization and control of migration. The different agents “Land” and “Kommune” represent the same state but different aspect of it, which leads to different requirements. And the office workers and migrants represent the human element, the individual that in the most basic sense just wants to exist according to their own wishes. Our “apparatus”, the immigration office represented by the streamer, stands in as a general placeholder for the most specific ingame manifestation of governmentality. It is the place in which the “ensemble of institutions” becomes visible for the players, the streamer as well as the audience, and where it has to be dealt with according to the greater rules existing in the gameworld. While the streamer is being tasked with “the exercise of this very specific albeit complex form of power” (governmentality), the audience has to deal with its consequences.¹³¹

Throughout this thesis we made a point in stressing the importance of these systems being very rigid and clearly defined. Rather, we described often how they are the product of the interplay of many different actors, all with different responsibilities and influence. In analogy with the so-called “immersive sims” we also discussed how emergent gameplay, e.g. the possibility to combine mechanics and tools in multiple ways, could be used to represent these systems ingame. But if we compare the design of our game systems with what we have described as the basis for emergent gameplay previously, it should become clear that we have not set up a game that allows for much experimentation. Our systems appear rigid, forcing the players to comply with the demands of our ingame agents and thus not allowing much

¹³¹ The short quotes and the paragraph in general refer to: M. Foucault: Governmentality, pp. 102-103.

space for experimentation between failure and success. The reason for this lies in the paradox of having to reduce and change the complexity of real world systems to make them accessible while making them still resemble their real life counterparts. This conundrum cannot be solved, but it creates a tension between what William Urrichio calls “the constraint of detail and the exhilaration of improvisation.”¹³²

This means that our design is still missing an element that could attract the attention of all players to this tension, inviting them to compare the game system with its real-world counterpart and discuss the differences, similarities and subsequent meaning. At best we would assume a discussion resulting naturally from the gameplay. Our implementation of the audience gaming system, the possibility for viewers to join in the game, is targeted exactly at this. The juxtaposition of different goals and interests and the (temporary) separation of losers and winners is not aimed at exposing a system of conduct but rather instill the wish to question this system of integration in general. And the Twitch chat itself is meant to be the stage for this discussion. Different than the immersive sims, our design does not enable the players to express themselves to the fullest through the combination of game mechanics but rather aims to have a discussion emerge within the chat during and after the game session. Our emergent gameplay is supposed to surface outside of what Katie Salen and Eric Zimmerman call the boundaries of the magic circle, the special place in which gameplay happens which is set apart from actions and consequences in the real world.¹³³ If this happens, we have successfully created a system that allows players to explore governmentality by challenging the logic of the system we have created.

This challenge can either emerge from the gameplay itself, by observing the actions a player is forced to take and questioning these, or from players approaching the game with a certain knowledge about migration and government and comparing the game’s system with this knowledge. This comparison would make Urrichio’s “tension” obvious and offer a start for further discussion and experimentation. However, we cannot assume that players will approach the game with previous knowledge, although the visual presentation, its name and potential marketing could already attract a specific audience with such knowledge. But at best,

¹³² W. Uricchio: *Simulation, History, and Computer Games*, p. 329.

¹³³ Cf. Salen, Katie/Zimmerman, Eric: *Rules of Play. Game Design Fundamentals*, Cambridge/London: The MIT Press 2004.

we will also reach those players who have not previously thought about migration and governmentality.

In “Persuasive Games” Ian Bogost speculates that games’ persuasive power “[...] is not equivalent to the *content* of videogames [...]”, but rather “[...] lies in the very way videogames mount claims through procedural rhetorics.”¹³⁴ So far, we have embraced this notion by focussing on the development of mechanics whose execution results in the practice of governmentality. To make sure that players are informed, we could now add a bunch of accompanying texts within the game to explain mechanics with the help of practices common in traditional linear media. But this would mean that we jeopardize our procedural rhetorics having a chance to work on their own. Instead, we will embrace simple hypertext to embed links into the game which will lead to a wiki page, especially set up for the game, which will be populated not only with background information but also manuals and explanations of design decisions.

The goal of our design is to create a simulation game enabling players to explore the concept of governmentality in the context of migration and integration. This exploration should not end in the game: We are not aiming to create an experience safely closed off from the rest of the world. Rather, our goal is to create a playful entry point into the discourse of migration, integration and governmentality that at best will lead to further investigation and exploration outside of the constraints of the game. To engage with other people within the stream is the first step to reach out for further information, With the simple hyperlink into the internet providing just that.

¹³⁴ I. Bogost: Persuasive Games, p. ix.

Conclusion

To govern means to control. The modern state in the so-called “West” is essentially built on the principles of administration and bureaucracy, constructed of various institutions and procedures, rules and regulations, forming an ensemble we call “governmentality”. Their sole target is to ensure the security of the state’s citizens. Movements of migration require these administrations to use their power to integrate newly arrived individuals into the political economy of the state. In times of a globalized economy national states are dependent on a constant flow of international labor in order to be able to compete on the global market and its constant innovations. Especially qualified professionals as well as highly qualified workers, as we have seen by the example of the need for caregivers in the Federal Republic of Germany, are sought-after. On the other hand, open immigration policies can lead to resentment in the native population, leading to the rise of nationalist and populist movements. These movements especially react towards migration in the context of refuge and asylum, as states react to this out of humanitarian and not primarily economic reasons. Whatever argument these different actors might mount, the target of governmentality remains to ensure a state’s population and its continued existence.

We have proposed that the relationship between migration, integration and governmentality can be explored through a digital game by exposing the general procedures that drive this process. Our goal was to propose the structure of a simulation game situated in one of the institutions or “apparatus of security” which administers migration and integration: the immigration offices.

First, we have been looking into major migration and integration theories to establish a common ground of research to base our game systems on. These theories range from neoclassical economic theories, which focus on the motivation of an individual for a better life, to more abstract economics that consider the whole world as a system. We also considered social-cultural approaches and analyses which focus more on factors like family and cultural connections to explain certain motivations for migration.

Second, we analyzed how national states structure the administration of migration within the governmental apparatus. The Federal Republic of Germany served as our main example framework. Here, the responsibility for migration is distributed between several agents within the governmental apparatus. “Bund”, “Länder” and “Kommunen” are all involved in this process, which begins with the issuing of laws by the “Bund” and is then

handed over to the “Kommunen” with the “Länder” being able to influence this process via connected policies like education. Typically for federal states this process is not a strictly hierarchical one, but involves a back and forth between the different agents and is also intertwined with various non-governmental institutions.

During the first few steps, we used game examples to link the theories and analyses always back to digital games and their design. We expanded on this in the third chapter by adding the concept of audience gaming to the formula. We speculated that an exploration of governmentality and migration, which includes many agents with different agendas, would profit from a multiplayer setting. But instead of just exploring a classic multiplayer setting, we went a step further and explored the possibilities of play on streaming platforms like Twitch, on which streamers can share their game sessions with others and interact with them in real time via chat. In recent years more and more game developers have started to make use of the Twitch chat to give the audience the possibility to take part in the game which is streamed. Unlike classic multiplayer games striving for a fair gaming experience for everyone, the situation of streaming presents streamer and audience from the get go with a more complex power dynamic, with streamers being dependent on their audience but having technically complete control over their chat.

In the last step we explored this further by first designing a single player simulation game which mimics the core elements of migration in an immigration office as observed in the Federal Republic of Germany, and then introducing the aspect of the streamer and the audience in it. The result of this theoretical exercise was ambivalent. One major problem was the necessity to make our analysis of real-world systems more accessible so it could be adapted in a game which is not too complex and can be understood fairly quickly. Additionally, to actually make the game playable we had to change certain principles to be able to balance to allow a continuous play to unfold. This lead to a simple simulation system that resembled its real-world counterpart not in every detail but rather in the way information and knowledge is being handed back and forth through the system. While the streamer took the role of the immigration office as an abstract unit, having to comply with the demands and regulations of political agents simulated by the game, the audience would take over the roles of individual migrants who have to achieve specific goals by applying for permits at the immigration office. With this entanglement we aimed to create a core conflict between the interests of streamer

and audience in the hope that this would lead to the exploration and further discussion of the relationship of governmentality and migration.

Our final design decision to create a Wiki with necessary background information of the real-world systems we based our game on is aimed at the notion that political discourse can never exist in a bubble. A game, like any other medium, has to be able to directly connect to the greater discourse to make itself relevant. This means to expose its shortcomings and be open about its intent. Our intention was to explore migration and governmentality in a playful way, to instill curiosity and further discussion. We are convinced that in order to do so a game does not need to be realistic or focussed on extreme accuracy. Rather, it is important for its design to support the formation of opinion, not to be subversive but rather persuasive in the sense of persuading people to research further, to challenge the game's rhetorics, to engage with the discourse. This is how we understand what Bogost calls "procedural rhetorics".

Prototype Manual and Game Design Document

Introduction

This document serves both as manual and as game design document for the prototype we developed based on the theoretical part of this thesis and the consequent game design we described and discussed in chapter 4 “Simulating the Administration of Migration and Integration.” Our original intention was to create a game design document completely separated from the practical prototype. This document would have worked out further details of our design principles and ideas. But as we continued with the development of the prototype we recognized that it would only be feasible to explore some of the core principles of our game design in it. This made it necessary to create a manual contextualizing the prototype. We therefore decided to combine manual and game design document to explain how the prototype has to be played and describe the different aspects of its underlying design. We will refer to the prototype by its descriptive working title **IMMIGRATION OFFICE SIMULATOR**.

The prototype differs from the design described in chapter 4 in the following ways: It focuses only on the core loop and systems consisting of migrants coming to the office with a specific goal, the office workers processing their request and a player having to decide their fate based on the office workers’ reports. The player will have to base these decisions on requirements presented by “Kommune” and “Land”. The aspect of audience gaming is not present in the prototype itself. This is due to the circumstance that the integration into Twitch makes the development of a separate webclient necessary which can handle more complex input than just simple text commands via the Twitch chat as we have seen in **DEAD CELLS**. As this is an integral part of the thesis, we expand on the specifics of such a webclient in this document nonetheless.

General Concept

The **IMMIGRATION OFFICE SIMULATOR** is a business management simulation game. It takes on the processes involving the immigration and naturalization of migrants in a foreign country. The player takes on the role of the director of an immigration office of an imaginary country. They need to manage workers, manage the flow of migrants, inspect the reports on migrant applications and base their decisions on a changing political environment.

The player's task in the game is to employ workers, who process migrants through their immigration steps like language skill checks and financial assessments. After the migrants go through these checks and processes, the player checks the application and gives their stamp of approval or denies their request.

The necessary skills required to play the IMMIGRATION OFFICE SIMULATOR are:

- Management: The office workers have to be organized.
- Observation and Association: Migrant applications have to be checked against requirements.
- Tactic: Based on the comparison of application and requirements the player has to make decisions.

Manual: How to play the prototype

The game is built to work on Microsoft Windows and Apple MacOS computers and designed to be played with a mouse. When it is launched, the player is presented with a pre-designed office environment. The introduction window that pops up will explain the basics and can be closed by pressing the button "Begin the day". This will start the first day of the game. A clock on the side of the screen represents the progress of the work day and the day will be over when it completes its rotation. Little by little, the workers (represented by blue cylinders) and then the migrants (represented by green capsules) will start coming in to the office. They will queue the information desk and then all the offices they need to visit to get their application processed. Workers and migrants can be clicked on to get basic information about them. When a migrant completes their application, the game will present a window showing a report on that application. The player then needs to observe the report and make a decision to accept or reject the application. This process will repeat multiple times until the day is over or there are no more applicants that day.

The player will get an end-of-day report of all the activities that happened when the clock hits its peak and the work day is over. All the remaining workers and applicants will leave as well. The game will proceed to the next day when the player closes the end-of-day report.

As the days pass by, occasionally, the requirements by the "Land" and "Kommune" might change and the player will need to adapt and strategize towards these new

circumstances. The IMMIGRATION OFFICE SIMULATOR prototype, as it stands, does not have an end or other levels.

Influences / References

The overall game design and prototype (in addition to our research on migration and integration of course) is mainly influenced by two games: THEME HOSPITAL (1998) and PAPERS, PLEASE (2013).

THEME HOSPITAL is a business simulation game which requires the player to set up a hospital to attract and treat patients with fictional diseases. It revolves around earning money with the facility in competition with other hospitals. The player has to set up different departments and hire proper personnel to keep the hospital operational and profitable.

Figure 1: Typical game view in THEME HOSPITAL (1998)



PAPERS, PLEASE is a puzzle simulation game. The player takes the role of a border officer of a fictional Eastern European country and has to check passports and other papers to determine if their holders are allowed to enter. The game is separated into days with each one introducing new governmental requirements and restrictions to the player.

Figure 2: Typical game view in *PAPERS, PLEASE* (2013)



Both games embody different aspects of the IMMIGRATION OFFICE SIMULATOR. From THEME HOSPITAL the general top down camera view was borrowed and the possibility to directly oversee the events in the office and check on the employees. PAPERS, PLEASE inspired the game's focus on the inspection of official documents and the subsequent punishment and reward of the player for (in)correct behavior (in the prototype punishment and reward systems will not be implemented).

Setting

The game is set in a immigration office of a fictional country. It has the layout of a typical modern office complex with a front desk/reception and several office rooms. These offices are populated with office workers who belong to different departments within the administration of the immigration office and are in charge of checking the different parameters of migrants required to reach their individual goals.

Core Gameplay Loop

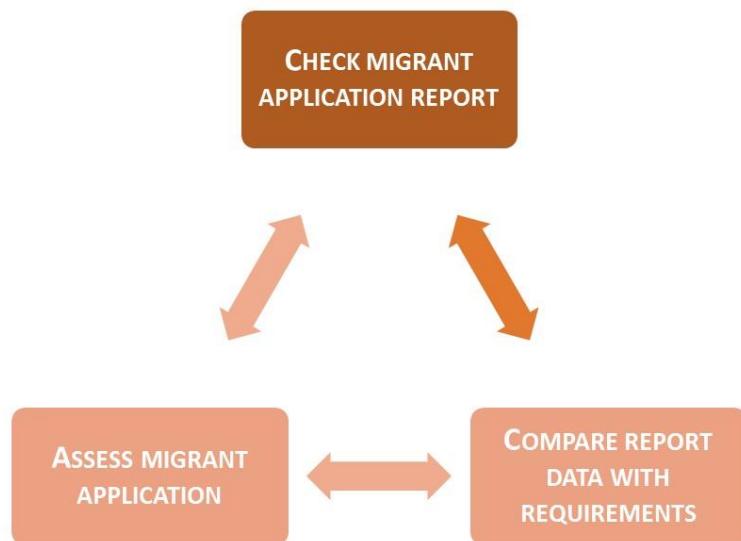
The primary aspect for the player is the management of the immigration office and its workers. The player is presented with an office floor with separate rooms, workstations and

waiting areas. Each workstation employs one worker. Different migrants have different goals they need to accomplish and they will queue these rooms as needed.

The game is structured in days. At the beginning of a day the migrants will start queueing at the reception. They will then go to one of the offices and workstations and continue from there. When the office workers have collected all necessary data from a migrant, the data will be delivered as a complete file to the player. The player is presented with a single report for each migrant. Based on the contents of the report, the player needs to make a decision to either accept or reject the application.

In the prototype, this results in the following core gameplay loop for the player:

Figure 3: Core gameplay loop of the prototype



The Migrants

In the prototype the migrants are not played by human players, e.g. the audience, but are controlled by the game. During a game session single migrant agents are created with a goal and are given a type. Depending on the goal the migrant has a different amount of ingame days to complete it.

These **goals** can be one of three: The application and attainment of

- a residency permit
- a settlement permit

- naturalization

The **migrant type** can be any of these:

- Qualified professional
- Highly qualified worker
- Researcher
- Self-employed person
- Jobseeker
- Intra-corporate transfer
- Family reunion

Both goals and types have different requirements which are set by two governmental agents in the game, the “Land” and the “Kommune” (see section “‘Land’ and ‘Kommune’”). While the “Land” is looking for three different migrant types each day, the “Kommune” is looking for migrants that support certain parameters. The parameters a migrant agent is starting out with are set randomly for each migrant on creation and represent their skills and social status. They can be between the values 0 and 100.

There are four **parameters** in the prototype:

- Finance
- Language
- Criminal record
- Education

Additionally, each migrant will have two **resources** which can be used to improve their parameter ratings:

- Money
- Time

The migrants have a limited amount of “time” during the off-hours of each day. They can make “money” by choosing to do work tasks in that period or they can improve their stats by doing other tasks. Each migrant is starting out with a money value randomly chosen between 100 and 500 and has eight hours each day to spend on activities.

Figure 4: Table showing the actions available to the migrants for improving their parameters

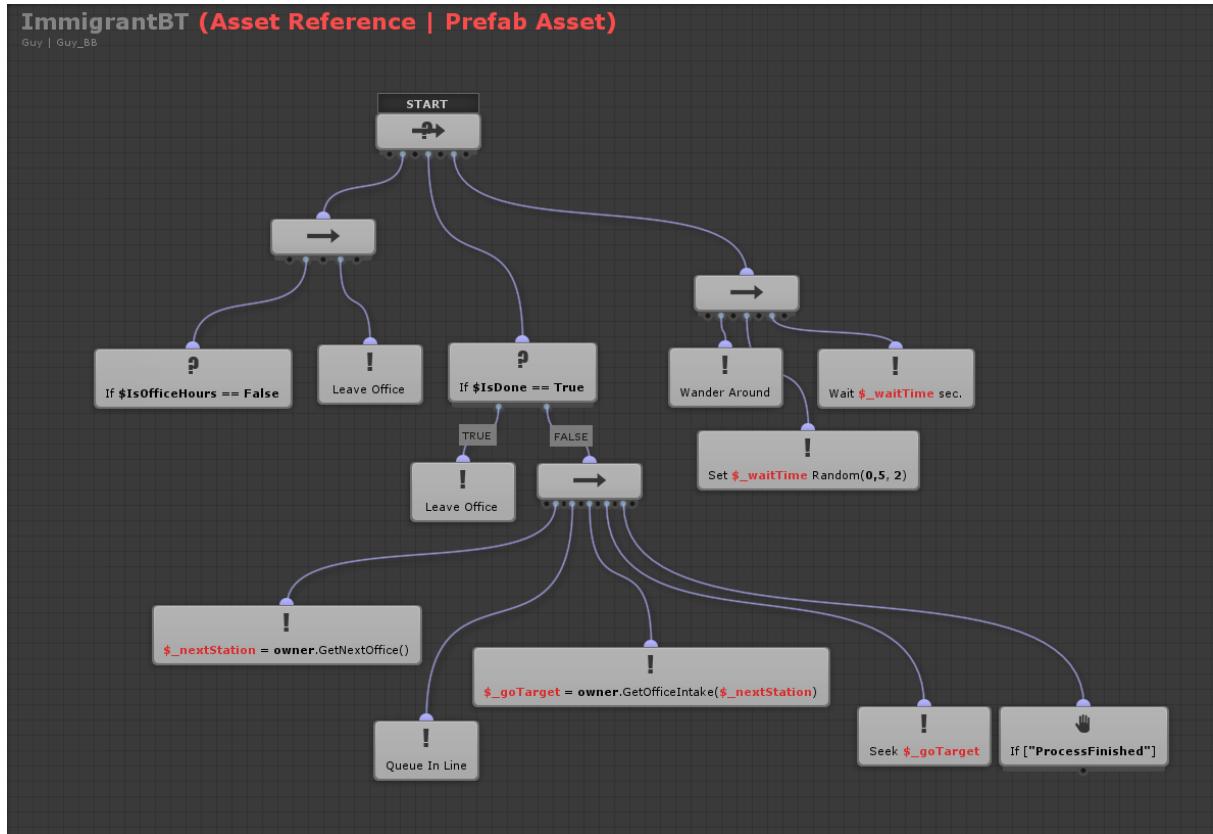
Parameter	Actions and Costs		
	parameter + 2	time (h) cost	money cost
finance	blue collar work	-2	+200
education	study community college	-2	-150
crime	community service - short	-2	0
language	course - short	-2	-150
	parameter + 4	time (h) cost	money
	white collar work	-4	+400
education	study school	-4	-250
crime	community service - medium	-4	0
language	course - medium	-4	-250
	parameter + 6	time (h) cost	money
	management	-6	+600
education	study university	-6	-350
crime	community service - long	-6	0
language	course - long	-6	-350

At the beginning of each day, each migrant will choose between two major options:

- 1) Go to the immigration office and apply with the current parameters
- 2) Improve the parameters by spending the two resources, time and money

The migrant agents are programmed so they will always try to reach the best possible set of parameters before applying. If they cannot meet them, they will nonetheless apply at the latest possible day.

Figure 5: Basic behavior tree of a migrant agent in Unity3D using NodeCanvas Framework



“Land” and “Kommune”

Next to the immigration office represented by the player there are two major governmental agents in the game:

- “Land”
- “Kommune”

Both are demanding to accept the application of a specific kind of migrant. The “Land” names three different migrant types each day. The “Kommune” names parameter values that it wishes the migrants to have.

This could for example look like this:

“Land” looks for

- Qualified professional
- Highly qualified worker
- Researcher

“Kommune” demands

- Finance > 30
- Language > 80
- Criminal record < 10
- Education > 50

The Office Workers

The office workers are responsible for investigating the migrants' parameters. In the prototype, their sole purpose is to collect the different datasets of the migrants' parameters and forward them to the player in the form of one report per migrant. They will appear automatically at the beginning of the day and leave at the end of a day.

The office workers have a skill level influencing their processing speed. The higher the level the faster an office worker can process a migrant. These levels can be trained by the player by sending the office worker away for one day. This improvement cycle can be triggered at any point during the day. The next day this worker will not appear in the office but instead be replaced by a worker with the lowest level. After a day of absence, the worker will reappear, having improved by one level.

Webclient for Audience Participation

Games that work with the Twitch API to enable audience participation work mainly with chat commands that allow certain actions within the game. However, our integration would make more complex interactions necessary. These actions make it necessary to create a specific screen for single audience members that only they can see and interact with. This can be realized either as a toggleable window within the Twitch stream itself or as a separate window. For both cases the development of a webclient is necessary. This webclient and the game hosted by the streamer would use a web server to communicate between each other.

Several games exist which make use of webclients to give players access to a game session hosted on a central computer or console from various devices. The most common examples can be found in the party game genre, for example in games like DRAWFUL and QUIPLASH by Jackbox Games, and in HTML5 games, which are able to run within web browsers and thus have by definition always a web client in which the game runs.

Figure 6: The lobby screen on the main device in QUIPLASH (2015)



Figure 7: A player creating a new game episode on a second device in QUIPLASH (2015)

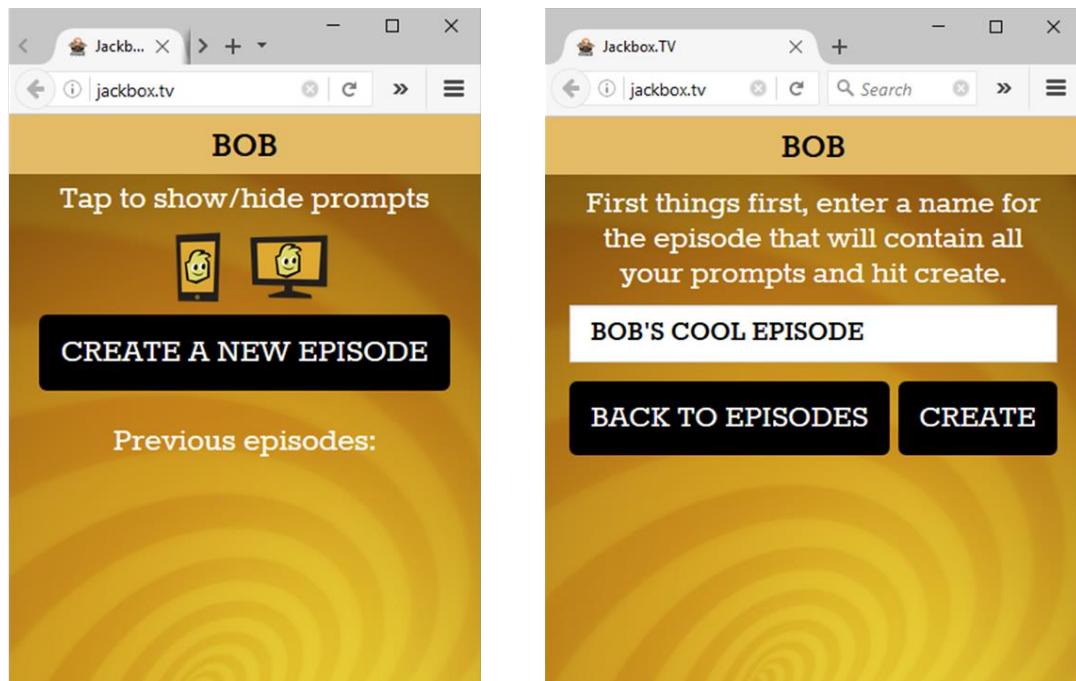


Figure 8: Lobby screen to create a game with friends in *DIE GROÙE WASSERSchlACHT* (2019)



QUIPLASH uses the webclient to enable players to opt in game sessions and also create episodes with their own questions (the goal of the game is to come up with funny answers to absurd questions). The game is fully controllable through different devices with the main action happening on a central hosting device. *DIE GROÙE WASSERSchlACHT* (2019) uses HTML5 to run on any device, from mobile web browsers on Android and iOS, to Desktop browser on PC and Mac and allows for easy cross platform play. We would use a similar approach and on top of that separate our data structure from the Twitch API, which makes it less prone to changes made by Twitch to their website.

The Twitch addon “Hearthstone Deck Tracker” for Blizzards multiplayer card game *HEARTHSTONE* (2014) shows how such a webclient could run within the stream itself with one instance for each audience member. In this specific case, the addon shows background information about the streamer’s card deck directly in the stream. So the window highlighted in figure 09 can be interacted with and even moved around in the Twitch window.

Figure 9: Streamer Slyssa playing HARTHSTONE (2014) with the “Hearthstone Deck Tracker” active and one of its windows highlighted



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De l'expérience ludique aux compétences humaines : le potentiel formatif des jeux de rôles ludiques

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Les jeux de rôles ludiques (noté JdRL), du fait de leur complexité et de leur diversité, forment une catégorie à part dans le monde des jeux. Parmi ceux-ci, le jeu de rôles sur table (noté JdR), objet de cette étude, présente un certain nombre de caractéristiques susceptibles d'en rendre l'utilisation pertinente dans le cadre du développement d'habiletés humaines. Afin de faciliter l'exploration et l'explicitation de ce potentiel formatif supposé du JdR, une phase de retour réflexif a été ajoutée à la suite de la phase ludique. Cet ensemble a été nommé jeu de rôles formatif (noté JdRF). La première partie, le JdR, consiste en l'élaboration progressive en groupe restreint d'une sorte de conte participatif animé par un meneur de jeu et dans lequel chaque joueur interprète le rôle d'un des personnages principaux. La seconde partie, le retour réflexif, prend la forme d'une explicitation intersubjective des spécificités et du sens de cette expérience ludique. Au cours des dernières années, le JdRF a été utilisé avec cinq groupes-chercheurs, soit une vingtaine de personnes, sous la forme de recherches-actions formatives (Bélanger & Daniau, 2009 ; Daniau & Bélanger, 2010). Le but de cette approche est d'amener les participants à se rendre compte qu'ils peuvent créer un monde et s'y ajuster, ce qu'ils font dans la vie.

Cette présentation s'appuie d'une part sur un travail de thèse visant à explorer le lien entre la pratique des JdR et le processus de maturation des adultes (Daniau, 2005) et d'autre part sur une recherche en cours portant sur les potentialités formatives de cette activité ludique (revue de littérature, expérimentations, entretiens et exploration d'approches similaires). Elle s'inscrit dans la lignée réflexive des nombreux rôlistes (joueurs et meneurs de JdR) et universitaires ayant contribué au cours des dernières décennies à

l'exploration de cette pratique ludique et qui ont souvent évoqué, parfois en termes d'évidences ou d'impressions, cette dimension formative¹. Après analyse de la littérature accessible, il semble pourtant que l'étude de ce potentiel formatif supposé du JdR soit encore relativement peu documentée, que ce soit en termes de contexte, de déroulement, de résultats ou encore de préconisations. La présente synthèse vise donc à rassembler un certain nombre d'éléments susceptibles de nourrir la réflexion quant à l'utilisation du JdRF dans le domaine de la formation des adultes.

Ce texte débute par une introduction au contexte d'émergence du JdRF et à ce qui le distingue des pratiques qui lui sont apparentées. Elle se poursuit par une présentation des spécificités du JdRF et une analyse succincte des données tirées des expérimentations. La suite est consacrée aux notions de jeux et de compétences ludiques (Brougère, 2005) puis à celles d'apprentissage, de développement et de compétences humaines (Hébrard, 2010). Enfin, le potentiel formatif du JdRF est brièvement discuté afin d'offrir au lecteur diverses pistes de réflexions, de recherches et d'interventions notamment dans le cadre de la formation des adultes.

I. CONTEXTE D'ÉMERGENCE DU JEU DE RÔLE FORMATIF

1. Les jeux de rôles

Comme l'atteste l'éthologie, le développement des jeunes mammifères passe notamment par les jeux (Fagen, 1995). L'être humain, qui se caractérise par un temps de maturation très long et un modèle de société complexe en constante évolution, est quant à lui tout autant susceptible d'apprendre que de jouer tout au long de sa vie. Ainsi, la pratique des jeux de rôles libres enfantins, qui s'inspirent des rituels sociaux des individus plus âgés, est tout à fait adaptée pour développer certaines compétences sociales (Château, 1967). Par la suite, de multiples formes de jeux de rôles sont susceptibles de répondre à l'évolution des besoins de l'individu. Parmi celles-ci, il est possible de distinguer :

¹ En 1981, Gary Alan Fine concluait déjà son article par cette notion de potentiel éducatif : « Proponents of fantasy games have argued that such games have considerable educational potential, and, while they are not designed for a didactic purpose, it is easy to see how they might be used in school systems to teach folklore and mythology, or cultural differences » (Fine, 1981, p. 275).

- les jeux libres des enfants, qui leur permettent de s'approprier et de réenchanter l'univers social dans lequel ils évoluent (Château, 1967 ; Sutton-Smith, 2001) ;
- les jeux ritualisés des adultes, qui participent du développement et de la reproduction de leur culture d'appartenance (Huizinga, 1951 ; Hamayon, 2012) ;
- les jeux relationnels entre individus, qui mobilisent différentes formes de langage pour enrichir les interactions, convaincre ou séduire (Anzieu, 1999 ; Winnicott, 2002) ;
- les jeux théâtraux des acteurs, qui confrontent et sensibilisent les spectateurs aux diverses facettes de la nature humaine (Boal, 1980 ; Page, 2004) ;
- les jeux de rôles thérapeutiques, qui accompagnent les participants dans l'amélioration de leurs conditions d'existence (Moreno, 1965 ; Berne, 1996) ;
- les jeux de rôles éducatifs, qui visent le développement de compétences et de savoirs (Van Ments, 1999 ; Chamberland et Provost, 1996) ;
- les jeux de rôles ludiques (JdRL), qui invitent les joueurs à créer ensemble une histoire imaginaire et à y prendre plaisir (Caïra, 2007 ; Bowman, 2010) ;
- les jeux de rôles formatifs² (JdRF), qui s'appuient sur les spécificités des JdRL pour accompagner les participants dans leur cheminement personnel (Daniau, 2005 ; White, 2008).

Ces diverses formes de jeux de rôles ne sont bien évidemment pas exclusives. Leurs innombrables variantes et autres hybridations rendent d'ailleurs très complexes tant l'analyse que la compréhension de leurs spécificités. Les spécialistes d'une approche singulière sont alors souvent amenés à situer leur pratique en fonction de celles déjà reconnues³. Dans ce contexte, il faut préciser que le JdRL se préoccupe plus particulièrement du développement d'un imaginaire groupal (Anzieu, 1999) susceptible de nourrir la satisfaction du groupe de joueurs. Quant au JdRF, qui partage ces mêmes préoccupations tout en se souciant du cheminement du

² Le terme formatif fait ici référence tant à la notion d'apprentissage transformatif (Mezirow, 2001) qu'aux potentialités maturationnelles des JdR (Daniau, 2005).

³ Augusto Boal, par exemple, s'est prêté à cet exercice en distinguant son théâtre forum du psychodrame de Jacob Levy Moreno comme suit : « le psychodrame se préoccupe surtout du passé, le théâtre forum du futur, des problèmes à venir. Le psychodrame a aussi pour but de guérir le patient, le théâtre forum de changer la société » (Boal, 1980, p. 189).

groupe restreint, il a aussi pour but d'accompagner de manière collaborative les individus dans leur développement personnel (Daniau, 2005). Cette préoccupation développementale propre à l'approche transformative (Mezirow, 2001) place d'ailleurs le JdRF à la confluence des pratiques ludiques, artistiques, éducatives et thérapeutiques (Daniau, 2010).

2. Les jeux de rôles ludiques

Les jeux de rôles ludiques (JdRL), qui consistent en une sorte de conte participatif, puisent leur source tant dans les jeux de simulation que dans les performances artistiques. La version sur table de cette activité ludique a émergé sous sa forme structurée au début des années 1970, notamment sous l'impulsion de Gary Gygax (*Dungeons & Dragons*, 1974). Depuis lors, sous l'influence des différentes communautés de pratique (Bowman, 2010) et des progrès technologiques, de multiples formes de JdRL ont vu le jour, créant ainsi une catégorie à part dans le monde des jeux. Parmi ces pratiques, il est possible de distinguer les jeux de rôles :

- sur table (JdR) : dérivés de *Dungeons & Dragons*, nommés aussi JdR papiers-crayons, se jouent en groupe restreint (généralement de 2 à 6 joueurs), avec ou sans règles, avec ou sans meneur de jeu (MJ), avec ou sans supports (décor, artefacts, musique) ;
- grandeur nature (GN) : héritiers des reconstitutions historiques, *murders parties* et du théâtre d'improvisation, se jouent entre quelques et plusieurs milliers de joueurs (huis clos, champs de bataille), des univers fictionnels au monde réel (jeux persistants) ;
- asynchrones (JdRA) : permettant de compenser l'absence physique des participants, se jouent entre quelques et plusieurs millions de joueurs, des jeux par correspondance aux forums réservés aux narrations collaboratives ;
- vidéos (JdRV) : utilisant divers supports numériques, se jouent sous des formes allant des jeux d'enquête en solo aux plates-formes accueillant des millions de joueurs dans des jeux en ligne massivement multi-joueurs.

Un groupe de rôlistes peut aussi choisir de mêler les genres en jouant autour d'une table (JdR) tout en visualisant leurs avatars plongés dans un jeu vidéo (JdRV), en jouant certaines scènes en extérieur (GN) et en poursuivant leurs interactions de manière intermittente au travers d'une narration collaborative à distance (JdRA). Pour

ajouter à cette confusion, de nombreuses activités ludiques qui présentent des similitudes avec le JdRL (jeux de négociation, d'exploration, d'enquête, *Livres dont vous êtes le héros*), que ce soit en termes de modalité d'interactions ou d'univers, y sont parfois abusivement assimilées. De plus, le JdRL faisant partie désormais des pratiques culturelles courantes, il tend à se décliner sous d'autres formes et à inspirer d'autres genres (cinéma, littérature). Ainsi, *Dungeons & Dragons* se présente à la fois sous la forme de JdRL, de jeux de plateau ou de cartes, de romans, de bandes dessinées, de films, de jouets, etc. Par ailleurs, chaque MJ étant susceptible de créer ou d'adapter au besoin, en s'inspirant tant de son expérience que de son contexte (littérature, cinéma, etc.), un nouveau JdR (univers, règles, scénario et ambiance), il est impossible d'en estimer la diversité.

3. Les jeux de rôles en formation

Les jeux de rôles éducatifs, tout comme les jeux et les simulations, sont fréquemment utilisés en formation des adultes, et ce depuis plus d'un demi-siècle⁴. Ces approches actives sont généralement employées comme levier pour renforcer la motivation et l'implication des participants dans leur processus d'apprentissage (Chamberland & Provost, 1996). Un de leurs avantages réside dans le fait que tant leur forme que leur contenu peuvent être adaptés en fonction d'objectifs prédefinis, qu'ils soient éducatifs (illustration d'un phénomène), émotionnels (activité brise-glace ou d'échauffement), artistiques (création collective) ou encore formatifs (trame de fond des rencontres). Dans un contexte de formation, l'évaluation des acquis peut alors s'appuyer, par exemple, sur les résultats obtenus dans le jeu, la qualité de la réalisation, l'adaptation aux règles prescrites, l'atteinte des objectifs éducatifs ou encore la complémentarité au sein du groupe (Sauvé *et al.*, 2007).

Le jeu éducatif est une « interaction des apprenants dans une activité à caractère artificiel, où ils sont soumis à des règles et dirigés vers l'atteinte d'un but » (Chamberland, Lavoie et Marquis, 1995, p. 65). Dans cette période d'engouement pour les jeux sérieux et d'expansion rapide des pratiques de ludification⁵, les créateurs de jeux éducatifs ont multiplié les approches visant l'atteinte d'objectifs éducatifs prédefinis, au risque parfois de perdre de vue certaines

⁴ La fondation de la revue internationale de référence *Simulations & Gaming* remonte à 1970

⁵ Le jeu sérieux (*Serious Games*) fait référence aux jeux vidéo comprenant des objectifs éducatifs. La ludification désigne plutôt l'utilisation des mécanismes du jeu pour rendre un domaine plus attrayant, en misant sur la prédisposition humaine à jouer.

conditions de réussite des jeux, telles que leur jouabilité (Genvo, 2012) ou encore le plaisir que peuvent en retirer les joueurs. Et pourtant, comme nous le rappelle Gilles Brougère : « Renvoyer le joueur à un univers qui n'a pas d'intérêt (trop réaliste ou pas assez réaliste), mettre en avant des objectifs d'apprentissage peuvent être des obstacles à l'expérience ludique et transformer l'activité en exercice. » D'où l'importance de « préserver l'"authenticité" de l'expérience ludique en renvoyant le sérieux au débriefing, à l'après-coup » (Brougère, 2010, p. 128-129).

La simulation est la « reproduction d'une situation constituant un modèle simplifié mais juste de la réalité » (*ibid.*, p. 81). Elle peut cibler un seul apprenant (simulateur de vol) comme un petit groupe de participants (*Jeu de l'île*) ou encore un réseau d'intervenants (manoeuvres d'urgence). Elle vise, au travers d'un entraînement à la tâche, à améliorer la capacité des participants à gérer l'imprévu et à développer une compréhension objective de leur réalité (conditions, durée). Dans leur version ludique, les jeux de simulations présentent une incroyable diversité de formes et de sujets (jeux de plateau, de construction, etc.). Le retour réflexif, qui vise à favoriser le transfert des compétences ainsi acquises, y joue alors un rôle fondamental (Sauvé *et al.*, 2007 ; Crookall, 2010).

Le jeu de rôle éducatif est une « interprétation du rôle d'un personnage en situation hypothétique en vue de mieux comprendre les motivations qui justifient les comportements » (Brougère, 2010, p. 71). Il vise notamment la prise de conscience de systèmes de représentations (*Blue Eyed, Brown Eyed* de Jane Elliott, 1968), une meilleure compréhension des motivations des participants, l'acquisition d'habiletés communicationnelles ou encore le développement de la créativité. Le jeu de rôle éducatif se présente sous de multiples formes, allant de la mise en situation de type vendeur – client, à la simulation globale, comme *L'immeuble* (de Debysier & Yaïche, 1986) qui permet d'habiter un immeuble imaginaire, en passant par le théâtre d'intervention (*Le théâtre de l'opprimé* d'Augusto Boal, 1971). La diversité des approches existantes rend ainsi difficile l'exercice visant à différencier cette pratique de celles reliées à l'improvisation, aux performances ou à l'art dramatique.

Le JdRF, qui présente de nombreuses similarités avec ces trois approches, s'en distingue néanmoins par la durée conséquente de l'expérience ludique et de la phase réflexive, l'engagement à long

terme du groupe de joueurs, la complexité de l'univers fictionnel convoqué ainsi que la richesse des interactions vécues. Il s'intéresse aussi plus particulièrement au développement de l'individu au travers de l'évolution du groupe de joueurs et de leur personnage, sans pour autant exclure le renforcement de certains savoirs spécifiques. Par ailleurs, en offrant au participant la possibilité de jouer un personnage différent de lui-même, le JdRF réduit le risque de susciter certaines manœuvres d'évitement reliées à la peur d'être jugés ou de mal agir, voire au besoin de vouloir se conformer aux normes sociales ou aux attentes supposées des formateurs (Mauriras-Bousquet, 1984).

II. LES JEUX DE RÔLES FORMATIFS

1. Description du JdRF

La phase ludique consiste en l'élaboration progressive, en groupe restreint, d'une forme de conte participatif. Chaque joueur intervient dans la fiction en cours en y interprétant l'un des rôles principaux. Un meneur de jeu (MJ) accompagne généralement cette création collective en veillant continuellement à renforcer la cohérence de l'imaginaire groupal ainsi convoqué. Un JdR comprend généralement une description de l'univers de référence (monde réel ou imaginaire), le système de règles qui le régit, quelques conseils d'ambiance ainsi que des scénarios prêts à jouer comprenant notamment des fiches pré-tirées de personnage et divers fac-similés. Un MJ expérimenté peut aussi préparer son intervention en utilisant un JdR existant, en en créant un sur-mesure pour l'occasion, ou encore, en misant sur l'improvisation pour proposer une performance unique. Quel que soit son choix, il pourra toujours enrichir son intervention en s'appuyant sur son expérience de rôle, sa culture générale, l'espace de jeu, les préférences des participants, les caractéristiques des personnages joueurs (PJ) et des personnages non joueurs (PNJ), etc.

Lors de la première rencontre, le MJ, après avoir brièvement présenté aux joueurs le contexte du scénario (univers, époque, culture, ambiance), invite ces derniers à créer ou à personnaliser leur fiche de personnage. Cette dernière comprend généralement une courte notice biographique ainsi que des informations, souvent chiffrées, relatives aux différentes dimensions du personnage (caractéristiques, compétences, etc.). Le MJ peut ensuite favoriser l'appropriation de ce rôle par le joueur au travers d'une courte mise en situation introductory. Tout au long du jeu, le MJ se charge à la

fois de :

- décrire les lieux dans lesquels les PJ évoluent ainsi que les actions qui s'y produisent, leur état d'esprit ainsi que leurs impressions (narration) ;
- appliquer les règles du jeu, les adapter au besoin afin d'en assurer la jouabilité et arbitrer les éventuels différents avec ou entre les joueurs (arbitrage) ;
- interpréter les rôles des PNJ de manière réaliste et encourager les interactions avec et entre les PJ (simulation) ;
- veiller à l'implication des joueurs, au réalisme du scénario et à la cohérence de l'ensemble afin de favoriser le développement d'un imaginaire groupal (cohésion).

Le JdR débute lorsque les PJ sont amenés à se rencontrer. Les joueurs s'engagent dès lors dans une succession de recherches d'informations, de résolutions de problèmes, de prises de décisions et d'actions afin d'atteindre leurs objectifs tant individuels que collectifs. Ils passent alors constamment et naturellement de la description narrative de leurs actions à la discussion informelle au sein du groupe (Caïra, 2007). Il est à noter qu'une personne souffrant de dépression, de paranoïa ou de schizophrénie éprouvera beaucoup de difficultés à s'investir dans un personnage imaginaire plongé dans un univers fictionnel (Winnicott, 1975).

Le retour réflexif représente environ un tiers du temps de jeu et intervient après la phase ludique. Il consiste en une explicitation intersubjective de l'expérience ludique vécue. Il prend la forme de rencontres de groupe durant lesquelles le MJ assume le rôle de facilitateur (Rogers, 1972), complétées au besoin par des échanges individualisés intervenant entre les séances de JdR. Les données sont alors collectées au travers d'enregistrements, de notes prises durant le jeu (fiches de personnages, résumés et schémas), au cours des échanges et entre les séances de JdR.

Les discussions portent tout d'abord sur les problématiques liées au scénario joué, au déroulement du jeu, aux choix des personnages et aux résultats obtenus avant de s'intéresser aux diverses spécificités du JdR (cadre, règles, déroulement et cohérence). Par la suite, elles s'intéressent plus particulièrement à la contextualisation puis à l'analyse du sens de cette expérience ludique. Enfin, le retour réflexif est aussi l'occasion pour les participants de s'interroger sur le potentiel transformatif des JdRF, tant du point de vue du processus

d'apprentissage que du développement de l'individu, ainsi que sur les éventuelles applications qui pourraient en découler dans le domaine de la formation. Dans ce cadre, l'appel à l'intersubjectivité vise notamment à multiplier les points de vue afin de susciter chez les participants une éventuelle transformation de leur système de représentations (Mezirow, 2001). L'apprentissage expérientiel (Kolb, 1984) sort alors renforcé par le rappel, l'analyse, la caractérisation et la valorisation de l'expérience collective (Crookall, 2010).

2. Expérimentations

Dans le cadre de ces recherches, cinq groupes composés de trois à cinq hommes et femmes âgées de 20 à 60 ans, tant néophytes querôlistes expérimentés, ont participé à des JdRF. Ces personnes avaient toutes une bonne expérience du domaine de l'éducation, que ce soit en tant que formateurs, enseignants ou chercheurs. Chacun des groupes-chercheurs ainsi constitué a contribué à l'exploration des spécificités du JdR selon différentes thématiques. L'animateur-chercheur a alors assumé le rôle de MJ durant le JdR et de facilitateur durant le retour réflexif. Les données ont été collectées autant que possible en présentiel durant et après le jeu sous forme de notes, de comptes rendus, d'enregistrements audio ou de courriels.

Les rencontres se sont déroulées le plus souvent durant des fins de semaine, dans des lieux sortant de l'ordinaire (ferme, chalet). Tant l'espace de jeu (aménagement et disposition) que l'organisation logistique (repas, repos) ont alors été pensés afin de renforcer la convivialité et favoriser les échanges. Les phases ludiques ont pris la forme de séquences de 3 à 14 heures de jeu. Elles ont été suivies, dès que possible, par une phase réflexive d'une durée équivalente à environ un tiers de ce temps. Deux de ces groupes-chercheurs ont ainsi totalisé chacun plus d'une centaine d'heures de rencontres étalées sur plusieurs années.

Les règles adoptées durant ces JdR se sont essentiellement limitées au respect par les joueurs des contraintes liées à la nature humaine de leur personnage (intégrité physique, santé mentale et habiletés sociales). Chaque PJ a été décrit brièvement au travers d'une courte biographie contextualisée portant notamment sur ses expériences de vie, son réseau relationnel, ses habiletés, ses préoccupations ou encore ses valeurs. Cette fiche de personnage a ensuite été complétée par une autre fiche, restée en possession du MJ, valorisant sous forme de pourcentages les forces et fragilités du PJ face au scénario prévu. Le hasard a été convoqué en de très rares occasions, au travers de jets de dés, afin de déterminer l'issue de situations sortant de l'ordinaire. Tout au long du jeu, l'accent a été

mis sur l'ambiance et sur l'inter-prétation des personnages.

Les scénarios proposés, inspirés des écrits de Lovecraft, se sont déroulés dans le monde occidental des années 1930, contexte favorable à la visualisation de stéréotypes communs et à l'émergence d'un imaginaire groupal durant le jeu (Daniau, 2005). L'un de ces scénarios, joué à plusieurs reprises afin de servir de référence, a d'ailleurs permis de valider le fait que, malgré l'existence d'une trame commune, chaque groupe développe un imaginaire groupal distinct et arrive à des résultats pouvant être radicalement différents. Les autres scénarios ont été créés à la fois à partir des préférences des participants, d'une improvisation introductory au contexte du scénario (association d'idée : spontanéité et cohérence) et du processus interactif de création des personnages par les joueurs.

Suite à ces expérimentations, les groupes-chercheurs ont estimé que les apprentissages suivants pouvaient être reliés à la pratique du JdRF :

- notions historiques et culturelles (années 1920, religions monothéistes) ;
- compétences de base (expression écrite et orale, résolution de problèmes) ;
- dynamique des groupes restreints (répartition des rôles, recherche de consensus) ;
- renforcement de l'envie d'apprendre (cours de langue, citoyenneté, interculturalité).

3. Analyse des données

L'analyse des données et des pistes proposées par les différents groupes-chercheurs a nécessité la mise en place d'un cadre de référence s'appuyant sur les spécificités du JdR ainsi que sur les différents niveaux de réalité vécus par les participants, à savoir : le personnage, le joueur, l'humain, la personne (Daniau, 2010)⁶. Ces quatre niveaux de réalité ont été ensuite volontairement reliés aux quatre niveaux de savoirs tels que présentés par René Barbier (2000) : le savoir-contenu, le savoir-faire, le savoir-exister et le savoir-se-situer. Chacun de ces savoirs est présenté ci-après avec la principale catégorie de compétences utilisée dans le cadre du JdR :

⁶ Cette catégorisation s'inspire de la triple dimension individu-espèce-société de l'identité humaine, indissociable de son environnement (ici ludique) proposée par Edgar Morin (2001). Elle renvoie aussi à celle proposées par Waskul et Lust (2004) qui distinguent la personne, le joueur et le personnage.

- **Personnage** (savoir-contenu et culture générale) : apprentissages thématiques ou disciplinaires, reliés au scénario du JdR (expérience du personnage, intrigue, ambiance, logique) ainsi qu'à l'univers proposés (Histoire, culture, idéologies) ;
- **Joueur** (savoir-faire et compétences essentielles⁷) : apprentissages intrinsèques ou expérientiels, reliés aux propriétés du JdR (cadre, règles, déroulement et cohérence) tels que la communication (lecture, écrit, oral), l'analyse (plan, schémas, calculs), les conditions de jeu, la répartition des tâches et la participation aux prises de décisions par le groupe ;
- **Personne** (savoir-exister et compétences transversales⁸) : apprentissages induits ou existentiels, reliés au déroulement du JdRF, tels que la dynamique des groupes restreints, la distanciation et l'empathie, l'envie d'apprendre (épistémophilie) ou la création collaborative ;
- **Humain** (savoir-se-situer et compétences humaines) : apprentissages émergents ou transformatifs⁹ (Mezirow, 2001), reliés à la contextualisation du JdRF, tels que l'arrimage de l'expérience à l'histoire de vie, le processus de maturation (conscientisation, émancipation, autonomisation et reliance) ou l'évolution des systèmes de représentations (Daniau, 2005).

⁷ Les 9 compétences essentielles (Canada) sont : Lecture, Rédaction, Utilisation de documents, Calcul, Informatique, Capacité de raisonnement, Communication orale, Travail d'équipe, Formation continue : [http://www.edsc.gc.ca/fra/emplois/ace/definitions/].

⁸ Les 9 compétences transversales (Québec) sont : Exploiter l'information, Résoudre des problèmes, Exercer son jugement critique, Mettre en oeuvre sa pensée créatrice, Se donner des méthodes de travail efficaces, Exploiter les technologies de l'information et de la communication, Actualiser son potentiel, Coopérer, Communiquer de façon appropriée :

[http://www1.mels.gouv.qc.ca/sections/programmeFormation/secondeaire2/medias/3-pfeq_chap3.pdf].

⁹ Une récente recension des travaux portant sur les conditions de réalisation de l'apprentissage transformatif affirme « qu'il est important de mettre l'accent sur l'appartenance au groupe et sur l'initiative individuelle, de favoriser la mise en commun d'activités axées sur l'expérience, de prendre en compte les interrelations entre la pensée critique et les aspects plus affectifs de l'apprentissage, de développer une conscience des influences personnelles et de celles liées au contexte, de promouvoir des contenus de cours faisant la promotion de certaines valeurs et d'accorder le temps nécessaire à la réflexion » (Taylor, 2000, p. 1). Le JdRF partage ces mêmes conditions de réussite.

Jeux de rôles formatifs : potentialités transformatives et niveaux de réalité

	Personnage	Joueur	Personne	Humain
Savoir	Savoir-contenu	Savoir-faire	Savoir-exister	Savoir-se-situer
Compétences	Culture générale	Essentielles	Transversales	Humaines
Source	Scénario du JdR	Propriétés du JdR	Déroulement du JdRF	Contextualisation du JdRF
Apprentissages	Thématisques	Intrinsèques	Induits	Émergents
Dimension	Disciplinaire	Expérientielle	Existentielle	Transformative
Exemple	Histoire	Analyse	Esprit critique	Parcours de vie

Cette progression dans la complexité des savoirs abordés au travers de la pratique du JdRF est notamment reliée au temps passé à jouer. Ainsi, une expérimentation unique permettra essentiellement d'explorer le savoir-contenu tout en se sensibilisant aux autres formes de savoirs. Alors que seule l'inscription dans une démarche à long terme permettra d'explorer activement l'ensemble de ces savoirs tout en s'engageant dans un processus de développement personnel. Par ailleurs, le potentiel formatif du JdRF semble directement lié au respect des spécificités du JdR suivantes :

- groupe restreint (5 personnes) : taille optimale pour la qualité des interactions (St-Arnaud, 1989) et l'émergence d'un imaginaire groupal (Anzieu, 1999) ;
- collaboration (implication solidaire) : on (y) gagne ensemble, à la différence des très nombreux jeux de rivalité ou de compétition (Caillois, 1991) ;
- interprétation (prise de rôle) : élargissement de l'éventail de rôles disponibles et meilleure adaptation aux changements (Moreno, 1965) ;
- recherche de cohérence (reliance) : appel à l'intersubjectivité et expérience des différents niveaux de réalité (Daniau, 2005).

L'analyse transversale des données individualisées a permis de déter-miner que les changements existentiels en cours chez les participants tendent à se refléter dans l'évolution de leur façon de jouer (Daniau, 2005). Quant aux groupes-chercheurs, ils tendent, avec l'expérience, à prendre de plus en plus d'initiatives. Les joueurs, en s'appropriant les règles du jeu, prennent ainsi progressivement confiance en leur capacité d'agir sur l'évolution du scénario. Ils improvisent plus facilement et interagissent avec plus de fluidité. Le groupe se consti-tuant autant dans le jeu que dans la réalité (Caïra, 2007), une partie des compétences ludiques développées ou

renforcées par les JdR est ainsi susceptible d'être transférable, au moins provisoirement, dans la réalité. Cet aspect en fait un outil particulièrement adapté dans le cadre de la mobilisation d'équipe.

III. DES COMPÉTENCES LUDIQUES AUX COMPÉTENCES HUMAINES

1. Jeux et compétences ludiques

L'activité ludique, notamment chez les enfants, a été largement utilisée dans le cadre d'approches thérapeutiques (jeu comme révélateur de personnalité), artistiques (jeu comme performance) ou éducatives (jeu comme levier d'apprentissage). Le lien naturel supposé entre le jeu libre de l'enfant et son développement (jeu comme catalyseur), en partie hérité de la pensée des romantiques du xviiie siècle, a aussi donné lieu à d'innombrables travaux visant à catégoriser les jeux en fonction de leurs potentialités éducatives respectives. Pourtant, comme nous le rappelle Gilles Brougère (2005), le transfert dans la réalité de ces savoirs acquis durant le jeu reste encore à démontrer. L'activité ludique demeure essentiellement un moyen d'acquérir, « par et pour » le jeu, de nouvelles compétences ludiques. Cependant, tout comme d'autres formes d'activités situées impliquant une participation active dans le processus de décision, le jeu est aussi une activité potentiellement porteuse d'apprentissages informels (Brougère & Bézille, 2007). Si l'authenticité de l'implication des joueurs durant la phase ludique leur permet de développer les compétences ludiques nécessaires pour améliorer leur jeu, l'adjonction d'une phase réflexive paraît dès lors essentielle pour favoriser le transfert de ces acquis dans la réalité.

Le jeu, bien plus encore que les jeux de rôles, a fait l'objet d'innombrables tentatives de définition. Chacune d'elles, plus ou moins complète ou contestée (Huizinga, 1951 ; Caillous, 1991 ; Sutton-Smith, 1998 ; Pingaud, 2002 ; Juul, 2003), reflète incidemment la culture d'appartenance, le domaine d'étude, voire les préoccupations personnelles de leur auteur. Pour sa part, Gilles Brougère (2005) propose de caractériser l'activité ludique au travers des cinq critères suivants (tout en précisant que seuls les deux premiers suffisent pour la cerner) :

- le second degré (le faire semblant),
- la décision (le choix de s'impliquer),
- l'existence de modalités de décision (les règles),
- l'incertitude quant à l'issue du jeu (l'indétermination).

- la minimisation des conséquences (la frivolité).

De cette caractérisation du jeu, il est possible de tirer certaines compétences ludiques génériques correspondantes. En ce sens, un bon joueur, bien qu'il soit difficile de définir cette notion, tendrait alors à :

- améliorer le réalisme de son jeu,
- s'impliquer dans le jeu, faire preuve d'empathie et inciter les autres à faire de même,
- respecter les règles du jeu ou les bonifier en accord avec les autres afin d'en améliorer la jouabilité,
- accepter l'incertitude et jouer simplement pour le plaisir,
- développer sa capacité de distanciation tout en jouant sérieusement.

Ces compétences ludiques génériques employées par les joueurs semblent correspondre assez bien à des compétences humaines pouvant se révéler très utiles dans la vie de tous les jours. Par ailleurs, de nombreuses autres habiletés humaines sont susceptibles d'être mises à l'oeuvre au cours d'un jeu : la capacité de mémoriser, de communiquer, de calculer, de dessiner, d'écrire, ou encore la culture générale. De plus, chaque jeu implique également le développement de compétences ludiques plus spécifiques permettant d'améliorer sa façon de jouer : logique et stratégie aux *Échecs* (jeu sans hasard), bluff et intuition au *Poker* (jeu de hasard), expression et écoute sensible au JdR, etc. Il en résulte que chaque manière de jouer peut être caractérisée par un certain nombre de compétences ludiques génériques et spécifiques pouvant être reliées à des compétences humaines particulières. Ces différentes compétences, qui sont tant développées que révélées au travers du jeu du joueur, risquent cependant, si le retour sur l'expérience vécue est négligé, de rester confinées dans le seul cadre de l'activité ludique.

2. Jeux de rôles formatifs et compétences humaines

Durant le JdR, les personnages sont inévitablement confrontés à des situations fictionnelles qui leur posent problème. Les joueurs vont donc être amenés à rassembler des informations, mobiliser leurs connaissances, faire appel à leur intuition, procéder par tâtonnement, envisager différentes pistes et collaborer dans le processus de prises de décisions. Si la phase réflexive permet ensuite d'accompagner les personnes dans leur prise de conscience des compétences mises en oeuvre dans le JdRF, elle les invite aussi à procéder à une analyse

inter-subjective et contextualisée visant à réfléchir au sens qu'ils donnent à cette expérience ludique et à la façon dont ils peuvent l'arrimer à leur cheminement existentiel.

En élaborant son propre jeu de rôle, le MJ doit aussi ajuster la complexité du scénario afin d'offrir aux participants un défi à la mesure de leur capacité collective. En un sens, il est à la recherche de cette expérience optimale favorable au développement personnel et de son corollaire, l'état de conscience nommé « le Flux » (Csikszentmihalyi, 2006) : objectifs clairs et atteignables, défi motivant correspondant aux capacités de l'acteur, source de satisfaction. De plus, tout comme nombre d'activités ludiques, le JdR remplit l'ensemble des conditions de l'expérience autotélique : concentration extrême sur l'activité ; perte de la conscience de soi ; distorsion de la perception du temps ; rétroaction directe et immédiate ; sensation de contrôle de soi et de l'environnement (Csikszentmihalyi, 2006). Les rôlistes sont ainsi invités, en jouant, à développer un sentiment de mieux-être et à renforcer la confiance en leur potentiel créatif (Henriksen, 2006).

Les compétences humaines telles que l'écoute sensible, l'esprit critique, l'empathie, ou la distanciation se développent au travers de notre relation avec ce(ux) qui nous entoure(nt). Elles constituent les fondements de notre humanité (Hébrard, 2010) et reflètent notre processus de maturation à l'oeuvre. Le JdRF, qui joue un rôle de révélateur à la fois de l'état d'esprit et des qualités humaines déployées par les joueurs durant le jeu, permet aussi de mettre au jour le système de représentations qui conditionne alors leur participation. Plus les rôlistes jouent, plus ils prennent confiance en leur capacité à improviser et en leurs partenaires de jeu, et ce, tant dans le jeu que dans la réalité (Daniau, 2005). Ils peuvent ainsi développer un senti-ment d'auto-efficacité (Bandura, 2003) qui leur permet notamment de renforcer, par la suite, leur motivation à apprendre, tant dans le jeu que dans la réalité (White, 2008). Par ailleurs, lorsque cette expérience se poursuit à plus long terme, les participants peuvent alors puiser dans l'évolution de leur manière de jouer pour jeter un regard renouvelé sur leur cheminement personnel (Daniau, 2005).

Pour sa part, le MJ est amené à développer, au travers de sa pratique ludique (narration, arbitrage, simulation et cohésion), un certain nombre de compétences humaines (autoformation, écoute sensible, improvisation, distanciation) susceptibles de se révéler très utiles dans le cadre de sa vie tant personnelle que professionnelle. Si le transfert dans la réalité de ces compétences est encore difficile à évaluer, le potentiel transformateur du JdR en termes existentiels

(envie de découvrir, affirmation de soi, développement de l'imaginaire) est en revanche nettement perceptible (Meriläinen, 2012).

CONCLUSION

Le but du jeu de rôle formatif (JdRF) est d'amener les participants à se rendre compte qu'ils peuvent créer un monde et s'y ajuster, ce qu'ils font dans la vie. Pour ce faire, tant l'authenticité que les conditions de réussite de l'expérience ludique doivent être préservées (conditions de jeu, jouabilité, attitude ludique, plaisir). En effet, le jeu de rôles sur table (JdR) offre déjà, de par ses spécificités, un terrain d'expérimentation favorable au développement de compétences potentiellement transférables dans la réalité. Ainsi, durant le JdR, les joueurs interagissent avec leur environnement en ajustant leur jeu au gré des personnages et des situations rencontrées. Tout comme dans la réalité, quoique sans réelles prises de risques, ils doivent alors composer avec les règles du jeu social, s'adapter à l'évolution de leur contexte, résoudre des difficultés, gérer leurs priorités et assumer les conséquences de leurs actes.

Afin de favoriser le transfert des apprentissages, les participants sont ensuite invités à créer des liens entre les différents niveaux de réalité vécus (personnage, joueur, personne et être humain) et les domaines d'apprentissages pouvant y être rattachés (disciplinaires, expérientiels, existentiels et transformatifs). Le retour réflexif permet ensuite aux participants d'explorer divers aspects de leur cheminement personnel, de donner du sens à cette expérience ludique et d'arrimer cette dernière à leur histoire de vie au travers d'une démarche de recherche de cohérence (Daniau, 2010). Le meneur de jeu développe, quant à lui, différentes compétences humaines (écoute, expression, improvisation, autodidaxie) pouvant se révéler très utiles dans sa vie tant personnelle que professionnelle.

Le JdRF peut être utilisé dans le cadre de la formation des adultes à titre de formule pédagogique, afin de sensibiliser les participants à une notion ou de renforcer leurs apprentissages dans des domaines tels que l'Histoire, l'inter-culturalité ou les compétences de base, ou encore comme support de formation pour les accompagner dans leur processus de raccrochage scolaire, de réinsertion sociale ou d'autonomisation. C'est aussi un outil de recherche-action pertinent pour approfondir notre compréhension des spécificités des différents JdRL. Enfin, du fait de ses qualités intrinsèques, le JdRF semble tout particulièrement adapté pour répondre à des besoins en termes de mobilisation d'équipe, de créativité collective, de formation de formateur ou de développement personnel.

Cependant, les applications formatives du JdRF sont en réalité limitées par les conditions de réussite des JdR, telles que la taille des groupes ou la durée des séances, lesquelles sont autant de contraintes difficiles à dépasser dans le cadre du système de formation dominant. De plus, en invitant l'individu à se laisser guider par sa curiosité, le JdRF place celui-ci au cœur même d'un processus d'apprentissage perçu comme global, situation qui ne répond pas forcément aux aspirations des apprenants ou aux critères d'évaluation liés aux savoirs disciplinaires. D'un point de vue plus radical, le JdRF nous invite aussi à repenser notre relation au savoir en offrant aux apprenants les possibilités de découvrir et d'approfondir par eux-mêmes, en jouant (sans imposer d'objectifs prédéfinis), de nouveaux centres d'intérêt susceptibles de les nourrir ensuite tout au long de leur vie. À la nécessité d'acquérir des savoirs imposés par la génération précédente, il oppose alors le développement de la curiosité, de l'autodidactie, d'un esprit critique (Pardo, 2014) ou encore la recherche de cohérence (Daniau, 2005). Autrement dit, non seulement le JdRF est bel et bien porteur d'un véritable potentiel transformatif, mais il permet aussi de susciter l'envie d'apprendre, de repenser notre relation au savoir (réappropriation du contenu et de la forme) et d'enrichir notre compréhension du processus de maturation de l'individu. En cela, pour le professeur Paul Bélanger, « le jeu de rôle ludique est un des nouveaux domaines prometteur dans le champ de l'éducation ».

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Le jeu peut-il être sérieux? Revisiter *Jouer/Apprendre* en temps de *serious game*

GILLES BROUGÈRE

Marc Lapprend dans sa communication, cite François Le Lionnais: "L'Oulipo est un jeu, mais un jeu sérieux". Qu'est-ce à dire: "Ceci n'est pas un jeu" ou bien encore "C'est un jeu et ce n'est pas un jeu"? Parler de jeu sérieux, c'est produire un oxymore. Reste que cette expression qui n'est pas nouvelle connaît aujourd'hui un succès grandissant en traduisant "serious game", domaine de développement récent du jeu vidéo à but "sérieux". Comment penser cette relation entre jeu et sérieux qui semble intégrer et étendre l'ancienne relation, tout aussi problématique, entre jeu et éducation ou apprentissage? C'est à travers l'idée que le jeu peut avoir une valeur éducative que le sérieux est venu s'inviter. Nous allons partir de la façon dont nous avons pensé cette relation, pour poser la question des relations entre jeu et sérieux.

Retour sur le passé d'une pensée

Dans *Jouer/Apprendre*,¹ j'ai tenté de penser les relations complexes entre jeu et apprentissage. Il s'agissait, d'où le titre, de refuser autant l'évidence d'une association (jouer et apprendre), que celle de l'opposition (jouer ou apprendre). On ne peut évacuer la relation, et cela d'autant plus que l'apprentissage est une activité sociale ou plutôt, si l'on sort de l'éducation instituée et des structures sociales construites pour apprendre ou supposées telles, une dimension de toute activité sociale. Nous insérant dans le paradigme de l'apprentissage situé,² nous considérons qu'apprendre est fortement lié à des pratiques sociales, que l'être humain est caractérisé par cette possibilité d'apprendre de l'expérience. En conséquence il n'y a aucune raison pour que l'expérience ludique ne s'accompagne pas, au moins de temps en temps, d'apprentissage. Par ailleurs il est évident que jouer implique apprendre le jeu; Gee³ a tout particulièrement développé cette question en ce qui concerne le jeu vidéo. Enfin des pédagogues ont associé, et cela de façon plus systématique depuis le début du XIXème siècle, jeu et projet éducatif.

¹ Gilles Brougère, *Jouer/Apprendre* (Paris: Economica, 2005).

² Jean Lave and Etienne Wenger, *Situated Learning: Legitimate Peripheral Participation* (Cambridge: Cambridge University Press, 1991).

³ James Paul Gee, *What Video Games Have To Teach Us About Learning and Literacy* (New York: Palgrave Macmillan, 2003).

Mon propos consistait à partir du fait que l'on joue pour le plaisir procuré par l'activité et non pour apprendre comme certains tendent à le penser. La logique du jeu renvoie à celle du loisir, d'un temps libéré des contraintes et voué au divertissement. Ce qui conduit à considérer que si apprentissage il y a il ne s'agit pas de la finalité de l'activité. Les théories qui ont tenté de montrer le contraire n'ont pas réussi à en administrer la preuve⁴. Cela reste de l'ordre d'une rhétorique⁵ dont on trouve l'origine dans la pensée romantique (Brougère, 1995).⁶

Le jeu apparaît comme une expérience spécifique, liée à l'amusement (au *fun*), socialement construite, s'appuyant sur diverses ressources que l'on peut évoquer sous le terme de culture ludique. Ce qui conduit à penser que jouer s'apprend, le plus souvent à travers l'entrée progressive dans une pratique ludique.

Cette activité ludique, profondément culturelle, au sens où la pratique laisse des traces, est largement réifiée sous forme de matériels, de façons de faire, de traditions. Au dix-huitième siècle, l'*Encyclopédie* a mis en évidence l'ingéniosité humaine relative aux jeux sans récuser pour autant leur dimension de divertissement. C'était là un paradoxe que de repérer combien les hommes étaient capables d'invention pour leur plaisir, ce que souligna le calcul des probabilités naissant (ou calcul des chances) qui trouvait dans de tels jeux une matière à penser.

Il en résulta l'idée d'utiliser le jeu pour l'éducation des enfants (puis plus tard des adultes quand une telle question vint sur le devant de la scène). Mais derrière cette association on trouve une diversité de stratégies: le point de départ est la ruse qu'Erasme énonce très clairement.⁷ Il s'agit d'utiliser le potentiel du jeu pour séduire les enfants, les conduire à s'engager dans des activités (comme apprendre le latin) dont l'intérêt ne semblait pas (déjà en ces temps lointains) de l'ordre de l'évidence. Pour Erasme, il s'agissait bien de tromper les enfants en donnant aux exercices scolaires l'aspect du jeu, en aucun cas de livrer l'enfant au jeu (associé au jeu d'argent pour lui et sans doute nombre de ses contemporains). Aujourd'hui on parlerait sans doute moins explicitement de ruse et de tromperie, mais de motivation. Le jeu permettrait de motiver les enfants. Cette vision qui maintient la séparation entre le sérieux de l'étude et le frivole du jeu, comme le fait la récréation, temps de jeu destiné à recréer les forces pour le travail, fut mise à mal par la conception romantique du jeu. S'appuyant sur une valorisation de l'enfant, de sa spontanéité et de la naturalité qu'il incarne contre la société, le jeu devient une activité naturelle qui contribue au développement de l'enfant. S'appuyant sur Jean-Jacques (Rousseau), Jean Paul (Richter) est le premier à énoncer clairement

⁴ Thomas G. Power, *Play and Exploration in Children and Animals* (Malwah, NJ: Laurence Erlbaum Associates, 2000).

⁵ Brian Sutton-Smith, *The Ambiguity of Play* (Cambridge, MA: Harvard University Press, 1997).

⁶ Gilles Brougère, *Jeu et éducation* (Paris: L'Harmattan, 1995).

⁷ Brougère, *Jeu et éducation*.

cette conception qu’Hoffman illustrera dans son conte *l’Enfant étranger* et dont Fröbel fera le fondement de sa pédagogie du Kindergarten. De façon explicite chez ce dernier, le jeu devient une affaire sérieuse. Lié à la nature, voir au divin, il ne peut plus être considéré comme frivole. C’est une rupture fondamentale dont les effets sont paradoxaux. En effet, la conséquence pourrait en être “Laissons les enfants jouer”, ce que fera une partie de la tradition issue du Kindergarten. Mais loin de conduire à considérer qu’il suffit de jouer, l’investissement sur un jeu sérieux conduit à proposer des objets, des activités, des jeux spécifiques à finalité éducative, à commencer par les dons de Fröbel.

Ainsi se développe une tradition qui consiste à produire un hybride, fort intéressant au demeurant, caractérisé par le mélange entre du jeu et de l’éducatif, entre ce qui relèverait d’une forme ludique et ce qui renvoie à la forme scolaire ou plus largement une forme éducative. Il s’agit soit de ludiciser à la marge l’exercice scolaire, soit de donner un contenu éducatif à un jeu avec tous les intermédiaires imaginables, des transformations en profondeur, à la reprise sans modification d’une pratique ludique dont on pense qu’elle a une valeur éducative en elle-même.

***Serious game* et jeu sérieux**

Ces nouvelles conceptions conduisirent à une tension pas toujours visible dans leur enchevêtrement, entre l’idée que le jeu est sérieux (i.e. éducatif) et celle qu’on peut le rendre sérieux moyennant des adaptations qui n’en transformeraien pas le sens.

Tout cela relevait d’un enjeu théorique qui n’intéressait que bien peu de monde, même si avec le développement de l’informatique il y a eu une première traduction dans ce nouveau monde. En effet, l’informatique est largement liée à la créativité d’activités frivoles et du jeu. Ce qui fait que les applications ludiques ont accompagné son développement, donnant parfois l’impression que les ingénieurs ont fait progresser la technique pour mieux jouer. Bien des innovations informatiques, faute d’avoir la moindre utilité, ont été utilisées dans l’univers du jeu. Et si le jeu a beaucoup contribué au développement de l’informatique, celle-ci le lui a bien rendu en révolutionnant le jeu. Le jeu vidéo est aujourd’hui plus qu’un jeu, une nouvelle culture qui interroge d’autres pratiques, en passe de transformer en profondeur le cinéma et les arts visuels.

Très vite le détournement éducatif s’est imposé autour du ludo-éducatif (chez les francophones) l’*edutainment* (chez les anglophones). Cette hybridation entre éducatif et divertissement informatique ou jeu numérique a eu son heure de gloire (limitée) mais semble avoir déçu tant les utilisateurs que les entreprises (hormis quelques niches). En effet face au développement d’un jeu vidéo enrichissant progressivement ses animations, ses mécanismes ludiques, sa capacité d’immersion du joueur, le ludo-éducatif dont les ficelles pédagogiques étaient parfois un peu trop visibles avait bien du mal à convaincre ses utilisateurs. Il était plus facile de convaincre les parents. L’analyse montrait aisément, à quelques rares exceptions près, que la dimension ludique était sacrifiée au procédé éducatif et il n’était pas

besoin d'être une spécialiste universitaire pour saisir le contraste avec les produits de plus en plus perfectionnés que proposait l'industrie vidéoludique. Il suffisait d'interroger ces experts que sont les joueurs, y compris les plus jeunes d'entre eux.⁸

L'arrivée tonitruante du *serious game* remet-elle en cause cette vision des choses, conduit-elle à repenser les relations entre jeu et apprentissage, entre frivole et sérieux? On pourrait dire qu'il ne s'agit que d'une nouvelle expression pour désigner la même chose et effectivement il est facile de montrer comment aujourd'hui des diffuseurs de jeux éducatifs surfent sur la vague de l'enthousiasme généré par le terme pour simplement rebaptiser des produits naguère dénommés ludo-éducatifs. Mais ce serait ne voir que l'effet d'opportunité que certains saisissent. Il faut par ailleurs garder une certaine distance avec la rhétorique du progrès que produit encore une fois le développement de l'informatique. Régulièrement des gourous annoncent la fin du monde ancien et l'émergence d'une nouvelle façon d'apprendre révolutionnaire à même de résoudre tous les problèmes. L'enthousiasme autour du *serious game* s'accompagne de telles prophéties auxquelles on aimeraient croire, mais nous savons que le monde est un peu plus compliqué que cela. Je le regrette, mais il ne suffira pas des *serious games* pour rendre le monde meilleur, plus beau, avec des enfants et des adultes apprenant tout dans la joie pour se diriger vers l'avenir radieux de la société de la connaissance. La croyance religieuse en un monde meilleur n'est sans doute pas la bonne façon d'analyser les choses dans un esprit qui se veut scientifique (ou essaie de l'être). Toutes ces réserves posées, je propose de prendre au sérieux (c'est le moins que l'on puisse faire !) l'émergence d'un jeu sérieux, que je préfère appeler en anglais "*serious game*" pour ne pas le couper de son contexte d'émergence et du réseau sémiotique où il s'insère. En effet il me semble que la traduction lui donne une dimension plus large (du fait de l'extension du terme "jeu" par rapport au terme "game") et risque de rendre plus difficile l'analyse. Il est important de marquer que sérieux s'applique à "game" et non à "play" ou à "jeu" dans son indifférenciation.

Cette expression, son succès et les "travaux pratiques" qu'elle génère (conception de *serious game* dans laquelle comme tout le monde je suis engagé, mon université m'ayant enrôlé un peu de force dans la conception et la réalisation d'un jeu sérieux sur les métiers de l'Internet) nous invite à la réflexion et m'invite plus particulièrement à revisiter ce que j'ai écrit.

On peut considérer, à partir de la littérature sur la question les *serious games* comme des jeux qui n'ont pas le divertissement, l'amusement, le *fun* comme leur objectif premier ce qui ne veut pas dire pour autant qu'il ne puissent être divertissants.⁹ Très vite la définition se décline à travers la variété des jeux

⁸ Mizuko Ito, "Education vs. Entertainment: A Cultural History of Children's Software", in Katie Salen (ed.), *The Ecology of Games: Connecting Youth, Games, and Learning* (Cambridge, MA: The MIT Press, 2008), pp. 89–116.

⁹ David Michael and Sande Chen, *Serious Games: Games that Educate, Train, and Inform*

visés, ceux qui concernent l'éducation n'étant qu'une catégorie souvent dénommée Digital Game-Based Learning (DGBL).

Cette construction d'une catégorie unique pour une diversité de produits renvoie au succès en 2002 d'*America's Army: Operations*, un jeu de promotion de l'armée américaine, outil de recrutement et de relations publiques. Il s'agissait, en s'appuyant sur des procédés éprouvés dans le jeu vidéo de proposer un *first-person shooter* (le joueur est à la place du soldat) qui impose les règles d'une opération militaire différente des logiques de nombre de jeux qui invitent à tuer tout ce qui bouge. Si le jeu profite de l'intérêt pour le combat militaire, thème traditionnel du jeu vidéo et sans doute du jeu en général, le sérieux du jeu est ici lié à la volonté de faire passer un message sur ce qu'est une opération militaire et les contraintes de l'armée américaine. Leur non respect implique à terme la sortie du jeu, leur respect de gagner des honneurs.¹⁰

On peut repérer deux aspects dans la constitution de cette catégorie qui très vite s'élargit pour intégrer des formes anciennes de produits numériques:

- une idée que l'on ne peut rejeter *a priori*, il s'agit d'utiliser les progrès du jeu vidéo pour concevoir des produits qui, autour d'autres objectifs, pourraient utiliser les mêmes atouts, les mêmes mécanismes, ce qui renvoie à la question du transfert de technologie;
- une vision très large du *serious game* dont la dimension éducative n'est qu'une parmi d'autres et qui se déploie plus fortement dans des jeux visant la sensibilisation à une cause, l'information; il s'agit de faire passer un message (à commencer par le premier, engagez-vous dans l'armée américaine). Les jeux sérieux renvoient de façon massive à la propagande ou la publicité comme on voudra, souvent (mais pas toujours) pour de nobles causes. C'est ainsi que j'ai été amené à évaluer un jeu qui invitait les enfants à comprendre l'intérêt d'une vaccination contre la méningite. Avec Bogost¹¹ on peut utiliser la notion de jeu persuasif (*persuasive game*) plus rigoureuse et adaptée que celle de *serious game*;
- enfin une question sur la relation entre jeu et sérieux (ou *a contrario* frivilité) qui invite à affiner la réflexion théorique sur le jeu. Au-delà de l'oxymore, un jeu sérieux qui n'est nouveau que par la publicité qui lui est faite, comment penser le jeu dans sa confrontation avec d'autres activités que le loisir. C'est par là que je commencerais.

(Boston, MA: Thomson Course Technology, 2006).

¹⁰ Ian Bogost, "The Rhetoric of Video Games", in Salen (ed.), pp. 117–139.

¹¹ Ian Bogost, *Persuasive Games: The ExpressivePower of Videogames* (Cambridge, MA: The MIT Press, 2007); Bogost, "The Rhetoric of Video Games".

Comprendre le jeu

L'analyse telle que je l'ai développée en 2005, s'appuyait sur un travail autour de la notion même de jeu. Comment penser le jeu? Avec comme principe le refus de le définir, de délimiter une sphère du jeu par rapport au non jeu, ce qui me semble essentiel pour éviter de confronter la réalité des usages à une norme artificiellement construite. Avec Wittgenstein¹² je pars du principe que le langage ne nous livre pas l'essence des choses, mais des usages socialement construits (liés à des formes de vie). Son analyse du mot "jeu" en tant que "game" s'appuie sur l'idée que les différents "jeux" partagent un air de famille; cela ne signifie pas que tous ont le même trait, mais qu'ils sont liés par un ensemble de traits, sans que pour autant deux éléments pris au hasard aient le même trait en commun (mais ils en auront avec d'autres jeux).

De cette analyse, je tire l'idée qu'il est vain de délimiter le jeu; en effet cette logique de traits peut conduire à considérer comme jeu ou non des activités qui ont des traits proches et il n'y a pas de règle autre que l'usage et le fait de se faire comprendre, dans un contexte donné, par son interlocuteur. De plus les marges, avec les questions qu'elles posent, me semblent particulièrement intéressantes pour la recherche, et je refuserais de répondre à la question "Est-ce (ou non) un jeu?" au profit de la question "En quoi cela peut-il être un jeu?".

Cela me conduit à proposer, à partir de la littérature et de son analyse, des critères qui sont des outils pour analyser ce que l'on appelle jeu. Le risque est toujours de prendre nos catégories qui permettent de penser le réel comme les catégories du réel même. Il n'y a pas dans le monde des jeux et des non-jeux mais des pratiques qui sont pensées par certains comme des jeux¹³ et par d'autres comme des non-jeux. Ce que nous pouvons tenter de comprendre, c'est pourquoi telle pratique est pensée comme jeu et dans le même temps pourquoi il peut y avoir ambiguïté. Ainsi les catégories proposées ont pour but d'appréhender la réalité non de la soumettre à celles-là; la réalité renvoie plutôt à une logique de continuum et de flou. Il ne faut pas croire que le monde obéit à nos catégories.

Ces critères au nombre de cinq ont été développés dans différents ouvrages,¹⁴ mais il me semble aujourd'hui qu'ils doivent être hiérarchisés plus précisément que je n'ai pu le faire dans le passé.

Le premier critère est d'autant plus important qu'il est partagé avec la simulation, la fiction mais aussi l'exercice, c'est ce que j'appelle le second degré (traduit en anglais par "*non literality*"), le faire semblant ou le "pour de faux", qui renvoie à deux auteurs, Bateson¹⁵ avec sa notion de méta-communication et

¹² Ludwig Wittgenstein, *Investigations philosophiques*, à la suite du *Tractatus Logico-philosophicus* (Paris: Gallimard, 1961).

¹³ Jacques Henriot, *Sous couleur de jouer* (Paris: José Corti, 1989).

¹⁴ Brougère, *Jeu et éducation*; Brougère, *Jouer/Apprendre*.

¹⁵ Gregory Bateson, *Vers une écologie de l'esprit* Tome 1 (Paris: Seuil, 1977).

Goffman¹⁶ qui développe à partir de celle-ci l'idée de modalisation au sens de mode musical, modalisation des cadres de l'expérience, en distinguant les cadres de la vie quotidienne des cadres qui sont modalisés, transformés; c'est le cas d'une fiction, du théâtre, et à bien des égards, de nombreuses situations scolaires, de la simulation, peut-être des situations-problèmes ou de certaines d'entre elles. En effet, pour Goffman, si l'exemple premier de ce qu'il appelle modalisation du cadre quotidien (que je traduis par transformation en une activité de second degré) est le jeu, il évoque d'autres situations qui répondent à la même logique dont ce qu'il appelle "itération technique" et qui comprend l'exercice scolaire ou la simulation qu'elle soit à visée didactique ou expérimentale. Il me semble que cela renvoie à la feintise chez Schaeffer.¹⁷

Le second critère qui me semble tout aussi essentiel, permettant de saisir le jeu au sein de la pluralité des activités de second degré, est celui de la décision, que je distingue volontairement et fortement des critères habituels qui renvoient à l'idée de liberté; celle-ci est trop difficile à manipuler, trop peu opérationnalisable: est-on libre de jouer, est-on libre quand on joue? On pourra toujours remettre en question le sentiment de liberté: on croit être libre mais en fait, on joue parce qu'il y a une détermination psychologique ou biologique qui pousse à jouer... On ne peut en sortir. La notion de décision me semble plus aisée à utiliser. Le jeu est profondément structuré par la décision: décision de jouer, peut-être, mais décision de continuer à jouer ou, plutôt, il convient de dire que le jeu n'est qu'une succession de décisions. Il est tel parce qu'il n'est pas une activité de premier degré, de la vie quotidienne mais une activité de second degré, qui n'existe que pour autant qu'on la maintient dans l'existence par un ensemble de décisions. Le monde réel continue à exister si j'arrête de décider; je ne fais plus rien, mais cela n'a pas beaucoup d'incidences sur le monde réel (tout au moins pour la plupart d'entre nous). En revanche, si l'ensemble des joueurs arrête de prendre les décisions, le jeu s'arrête, le jeu ne tient que par leurs décisions. Si j'arrête de décider, je me retire du jeu tel l'enfant qui lève son pouce. On participe au jeu en décidant, on se retire du jeu quand on arrête de décider.

J'ai tendance à penser aujourd'hui que ces deux critères suffisent à analyser les situations pour en saisir la dimension ludique ou non. La présence d'une activité de second degré accompagné de la décision (en particulier collective), nous conduit *de facto* dans l'univers potentiel du jeu (si tous les participants sont du côté des décideurs, contrairement au spectacle où une partie des participants ne décide pas).

A partir de ces deux éléments qui définissent l'espace du ludique on trouve deux caractéristiques associées (l'existence de modalités de décisions dont les règles sont un exemple et l'incertitude, l'absence de pré-détermination de la fin) et une caractéristique conséquente, la frivolité ou minimisation des conséquences.

¹⁶ Erving Goffman, *Les cadres de l'expérience* (Paris: Les Éditions de Minuit, 1991).

¹⁷ Jean-Marie Schaeffer, *Pourquoi la fiction?* (Paris: Seuil, 1999).

Il s'agit là des trois autres critères selon mes analyses antérieures, mais que j'aurais tendance à isoler comme des conséquences des deux principaux critères. Je définirais ma proposition sous la formule 2 + 3 critères et non plus 5. Ces trois autres critères ne sont que les effets de cette configuration, cette association entre second degré et décision, caractérisant les jeux dans leur diversité:

- les jeux supposent un système de décision – ils varient selon le système de décision avec deux limites problématiques: la contrainte (l'absence de choix possible), le n'importe quoi (tout est possible). Il ne s'agit pas de savoir si cela est du jeu, mais les marges permettent toujours de se poser des questions intéressantes;
- les jeux impliquent une incertitude, avec les marges qui seraient la fin prévue d'avance (on sort du jeu) ou une telle incertitude que l'on ne saurait quoi faire et toute décision en deviendrait impossible (selon le modèle de l'âne de Buridan);
- les jeux impliquent une absence de conséquence ou minimisent les conséquences, avec à nouveau deux limites, c'est la réintroduction de conséquences fortes ou l'absence totale d'intérêt pour l'activité qui à force de minimiser les conséquences perd toute possibilité d'investissement pour le sujet.

L'intérêt de ces trois critères est lié à leur opérationnalité, à ce qu'ils sont surtout des grilles d'analyse des activités. Ainsi nous permettent-ils d'entrer dans la logique d'organisation, en particulier à travers celle des règles qui diffèrent selon qu'elles sont déjà là et s'imposent plus ou moins, ou selon qu'elles sont négociées par les joueurs voir inventées au cours du jeu. Elles sont un moyen parmi d'autres de comprendre comment la décision, indispensable au jeu, s'organise.

La frivolité est un critère qui n'est pas absolu mais relatif et que j'emprunte à Bruner¹⁸ en tant que minimisation des conséquences. Certes le jeu, toute activité de second degré qu'elle soit, reste également une activité de premier degré, c'est-à-dire qu'on ne quitte jamais le monde; si un enfant joue à Superman et se lance par la fenêtre du quatrième étage, les lois de la pesanteur vont s'imposer à lui et il y aura les conséquences du premier degré. Toute activité est aussi une activité de premier degré avec des risques et toute activité a des conséquences comme peut en avoir le fait de perdre trop souvent. La différence est que le jeu permet de mettre à distance les conséquences. Un enfant qui perd va pouvoir dire "il est nul, ce jeu..."; c'est une façon de se dégager. Tandis que l'enfant qui a une mauvaise note peut penser que le professeur est nul mais il y a un poids des conséquences. Cette notion de minimisation des conséquences est intéressante car très opérationnelle à condition d'accepter d'être dans le flou, c'est-à-dire qu'elle ne permet pas de

¹⁸ Jérôme Bruner, *Le développement de l'enfant: savoir faire, savoir dire* (Paris: P.U.F., 1983).

construire une frontière mais de voir si on est dans une situation qui se rapproche du jeu parce qu'on arrive à minimiser les conséquences ou au contraire qu'on est hors du jeu parce que, malgré la dimension ludique apparente, il y a des conséquences. Le football professionnel n'est peut-être pas complètement du jeu parce que les conséquences de ce qui se passe sur le terrain sont importantes pour les joueurs.

Or si l'on regarde la définition de sérieux telle que proposée par un dictionnaire (*Le Robert*), le premier sens est le suivant: "Qui ne peut prêter à rire ou être estimé sans conséquence". Un jeu sérieux est un jeu qui a des conséquences (ou soyons plus réaliste dont on espère qu'il ait des conséquences). Il y a alors deux façons de considérer le jeu sérieux, ce n'est pas un jeu car un des critères, la frivilité ou l'absence de conséquence, est absent, ou bien c'est un jeu car ce critère est relatif.

Un jeu peut-il être sérieux?

Si l'on reprend cette analyse pour l'appliquer au jeu sérieux, on peut considérer que le jeu dit sérieux est caractérisé par les éléments suivants (sans s'occuper de savoir s'il est légitime de l'appeler jeu, de fait des locuteurs le nomment ainsi et il est plus intéressant de comprendre quelles en sont leurs raisons): il s'agit bien d'un univers de second degré (fictif, lié au faire semblant ou à la feinte) dans lequel un acteur (que de ce fait on dénomme "joueur") prend des décisions de façon individuelle ou collective; il suppose des mécanismes de décision, des procédures.¹⁹ Ces deux critères définissent le minimum pour parler de jeu, inscrivent la pratique dans le domaine du jeu potentiel. Si l'on affine l'analyse, on peut mettre en évidence le mécanisme qui permet la décision, ou la rhétorique procédurale.²⁰ C'est ce que propose le jeu en tant *game*, objet technique et logiciel (*software*). Le *serious game* est pris dans une tension entre l'usage des mécanismes qui ont fait leur preuve dans les jeux vidéo (le *gameplay*) et la nécessité de disposer de procédures, de mécanismes de décision en harmonie avec l'objectif du jeu. On voit déjà comment ce critère inscrit le *serious game* dans une tension entre logique du jeu (*gameplay*) et logique de l'apprentissage ou de l'univers de référence. C'est sans doute là que se joue la différence entre simulation et jeu de simulation, entre la volonté de reproduire procédures et mécanismes du réel et celle de valoriser des logiques ludiques issues de jeux dont le divertissement est la finalité.

La logique des deux produits diffère dans la mesure où, à la base du jeu à finalité de divertissement, il y a une logique ludique (un *gameplay*) que l'on va intégrer dans une histoire, un univers fictionnel adapté à celui-ci, alors que le *serious game* va procéder à l'inverse: à l'origine il y a un univers de référence (ce qui est à mettre en valeur ou à apprendre) sur lequel on va greffer un *gameplay* plus ou

¹⁹ Bogost, *Persuasive Games*; Bogost, "The Rhetoric of Video Games".

²⁰ Bogost, *Persuasive Games*; Bogost, "The Rhetoric of Video Games".

moins adapté. Pour illustrer cela à partir du jeu sérieux que nous développons dans mon université, le point de départ est de valoriser les métiers de l'Internet pour des lycéennes et accessoirement leur montrer que l'on trouve les formations adaptées à Paris Nord. Il a fallu ensuite trouver un *gameplay* qui respecte cet univers tout en permettant une expérience ludique. L'opposition doit être cependant nuancée par le fait qu'un certain nombre de jeux vidéo fonctionnent de la même façon, quand il s'agit par exemple de partir d'un film et de créer le jeu vidéo qui va avec. Reste que la dimension ludique est essentielle, l'objectif n'étant pas d'apprendre le film. Cette opposition est en partie neutralisée dans le jeu de référence au *serious game*, *America's Army*, dans la mesure où le combat militaire est non seulement présent dans nombre de jeux vidéo, mais sans doute une structure appropriée par l'univers ludique bien avant celui-ci du fait de son potentiel ludique (dans le faire semblant s'entend). Donc faire un jeu sur l'armée avec un objectif moins d'apprendre que de valoriser le métier de militaire permet d'entrer dans une logique ludique sans problème. Le premier "*serious game*" de cette nouvelle ère (car il y en a eu d'autres auparavant) est caractérisé par l'absence de tension, ou une tension limitée liée au fait que les principes essaient de respecter la logique auquel un soldat professionnel est soumis ce qui l'éloigne des mécanismes de nombreux jeux vidéo. Cela a pu donner l'impression à certains qu'il n'y avait pas de tension entre divertissement et sérieux, qu'il suffisait de substituer l'un à l'autre sans que rien ne change au fond.

Nous pensons au contraire que cette tension structure le jeu sérieux dans bien des cas et montre justement comment la question du mécanisme de jeu peut être en tension avec la volonté de réalisme, de rendre compte du réel. Cela permet de saisir comment certains produits sont indéniablement à ce niveau des jeux, et comment d'autres valorisant la simulation du réel contre l'intérêt ludique du mécanisme, sortent du jeu. Il s'agit d'un continuum, du plus ou moins jeu. Avec une dimension qu'il nous faut ici prendre en compte et qui vient complexifier l'analyse que nous proposons.

Le jeu est une réalité double²¹ qui articule une structure ludique (l'aspect *game* ou *gameplay*) et une attitude ludique (le *play*). Or le mécanisme de décision peut être construit (programmé) pour permettre une action, une interactivité qui valorise le sentiment de décider propre au jeu (ou non) et le joueur peut ressentir cette dimension (avoir le sentiment de jouer, au sens de décider même s'il s'agit partiellement d'une illusion, mais le jeu est illusion reconnue et acceptée comme telle) ou ne pas la ressentir ce qui le conduira à ne pas penser comme jeu son activité.

Cette tension nous la retrouvons dans les deux autres critères relatifs. Il peut y avoir plus ou moins d'incertitude dans le jeu, la logique ludique s'articulant sur la gestion de l'incertitude et donc sa présence, mais l'objectif consistant à faire passer

²¹ Henriot.

un message peut limiter l'incertitude pour conduire le joueur vers des objectifs souhaités. D'une certaine façon la manipulation peut se substituer au jeu, le joueur pouvant ou non en avoir conscience.

Elle se retrouve tout particulièrement dans le critère de la frivolité qui entre en contradiction avec le nom même, en s'opposant au sérieux. Mais justement, nous l'avons montré, il s'agit d'un critère relatif, la frivolité du jeu conduisant à une logique de minimisation des conséquences. Basculer dans le sérieux, c'est s'attacher aux conséquences, que ma société ait une bonne image, que l'étudiant apprenne. Il s'agit d'entrer dans une logique de persuasion maîtrisée. Là encore on peut plus qu'une opposition, évoquer une tension. D'une part, les jeux vidéo de divertissement ne sont pas sans conséquence, liés aux choix des thèmes, à la mise en scène de la culture extérieure au jeu, sans parler des conséquences positives ou négatives que la littérature évoque. Il est vrai que l'absence de légitimité culturelle de ceux-ci tend à plus souvent parler des conséquences négatives que positives.²²

D'autre part, choisir un jeu plutôt qu'un autre support pour produire un message est un moyen d'en minimiser les conséquences, au sens où l'on choisit de valoriser le fait que le joueur ait le souvenir de la bonne expérience vécue (associée alors à la marque, à l'organisme) plutôt que celui de contenus précis. Au sein même du jeu sérieux, frivolité et sérieux peuvent s'articuler ou s'opposer. Bien entendu on peut imaginer que toute dimension frivole a disparu et l'on peut se poser la question du jeu; c'est plus particulièrement vrai dans les jeux sérieux à finalité d'apprentissage que dans ceux à finalité de sensibilisation. C'est là que la catégorie fourre-tout qu'est devenu le *serious game* pose problème. Son ancrage dans des logiques de promotion, de publicité, de propagande ou de critique politique implique une relation complexe entre dimension ludique pour séduire et contenu sérieux pour persuader, l'un pouvant disparaître dans l'autre. Avec l'extension à des produits dont la finalité éducative ne peut se limiter à recevoir une information ou avoir une bonne opinion, le poids des conséquences s'affirme, le sérieux risque de chasser le ludique et l'on retrouve les antinomies entre jeu et éducation évoquées dans les précédentes analyses.²³

En revanche, le jeu sérieux s'il reste jeu peut être retraduit comme frivolité sérieuse pour souligner la tension qui donne un sens au terme. Comment rester jeu et avoir une dimension sérieuse, comment gérer des conséquences tout en les minimisant? A cela s'ajoute la double dimension de la structure de jeu (et la gestion de ces contradictions dans le programme) et de l'attitude du joueur qui peut selon sa pratique aller du côté du sérieux ou du frivole. Le contexte peut être un élément important: jouer à un jeu en classe ou dans un contexte éducatif peut en changer le sens.

La notion de jeu sérieux peut ainsi illustrer la tension qu'il y a entre jouer

²² Schaeffer.

²³ Brougère, *Jeu et éducation; Brougère, Jouer/Apprendre*.

et apprendre, selon que l'on accorde de l'importance à une formalisation de l'apprentissage ou que l'on accepte l'idée que l'apprentissage viendra en plus sans que l'on cherche à le formaliser.

Frivolité sérieuse et pensée du jeu

Cela nous permet de reprendre les deux autres dimensions que nous avions évoquées pour analyser le *serious game*. D'abord la question du transfert, l'idée naïve selon laquelle il suffit de transférer les caractéristiques du jeu vidéo (ses techniques d'immersion narrative, son *gameplay*) pour obtenir un jeu sérieux. Le jeu vidéo est un tout, le thème, les objectifs contribuent tout autant que les animations (immersion en 3D par exemple) et les mécanismes ludiques à en faire un jeu au sens où nous l'avons analysé. La preuve en est l'intérêt pour des jeux peu sophistiqués d'un point de vue technique (comme Tétris ou des jeux intrusifs utilisant les e-mails). Ce n'est pas le transfert de technique qui fait le jeu, même si les techniques peuvent y contribuer. Renvoyer le joueur à un univers qui n'a pas d'intérêt (trop réaliste ou pas assez réaliste), mettre en avant des objectifs d'apprentissage peuvent être des obstacles à l'expérience ludique et transformer l'activité en exercice (ce qui ne signifie pas qu'il n'est pas intéressant). Le transfert relève parfois de la ruse (habiller de techniques sophistiquées des contenus éducatifs classiques), parfois de l'illusion de la rupture radicale avec le monde d'hier. Il peut renvoyer à des stratégies industrielles (comment gagner de l'argent en diffusant le jeu vidéo hors de la sphère du divertissement) ce qu'est en grande partie l'engouement pour le *serious game* qui s'accompagne des chiffres faramineux que pourrait représenter ce secteur dans quelques années, chiffres en grande partie imaginaires qui risquent dans ce domaine après d'autres de produire une bulle spéculative dont on peut se demander quand elle va éclater.

Nous pouvons revenir sur le deuxième point soulevé qui renvoie à la diversité des jeux sérieux, où ceux à finalité d'apprentissage ne constituent qu'une partie, sans doute la plus problématique. Que la publicité reste frivole dans sa transmission de messages est cohérent avec la logique de séduction et de captation des publics. Quand il s'agit de jeux à finalité éducative, la question des conséquences (a-t-on appris ou non) et de leur évaluation (surtout en formation des adultes où le retour sur investissement est une question essentielle) devient centrale. Dans l'ensemble des *serious games*, certains seraient plus sérieux que d'autres, plus attentifs aux conséquences et à la réduction de l'incertitude. Si dans certains produits la tension conduit à valoriser le jeu (c'est le cas du jeu que nous faisons pour mon université), dans d'autres cas "jeu" est pris de façon vague et il s'agit bien d'un support éducatif qui est mis en place.

L'intérêt de l'émergence de cette catégorie hétéroclite du *serious game* est de permettre d'affiner la question du jeu. Elle ne conduit pas à opposer un "jeu ludique" (expression dont on reconnaîtra très vite l'absurdité) à un jeu sérieux, mais plutôt de saisir l'intérêt de la question même du rapport du jeu au sérieux. Le jeu est une chose sérieuse et n'est pas une chose sérieuse selon la façon dont on le

perçoit. Le sérieux s'accommode du jeu ou le détruit selon les cas, les pratiques, les produits. On peut dans certaines stratégies préserver l'“authenticité” de l'expérience ludique en renvoyant le sérieux au débriefing, à l'après-coup.

Mais sans doute faut-il situer cette question en relation avec la place du divertissement dans notre société articulée à l'importance accordée à la diffusion des connaissances et de l'éducation. Le jeu sérieux (qui pourrait s'élargir autour de la notion de loisir sérieux) pose bien la question de l'articulation de ces deux dimensions en forte tension dans notre société qui nous soumet (et plus encore les enfants) à une double injonction: “tu dois te divertir” et “tu dois apprendre”. Les tenants du *serious gaming* pensent parfois avoir résolu la quadrature du cercle dans leur grande naïveté, mais il n'en demeure pas moins qu'ils posent de façon pratique une question fondamentale à laquelle nous sommes confrontés tant dans nos pratiques professionnelles que dans notre vie quotidienne. Je ne prétends pas répondre à cette question, mais tout au plus contribuer à mieux la poser.

EXPERICE – Université Paris Nord

Contextualiser les théories du jeu de Johan Huizinga et Roger Caillois

Contextualizing the Theories of Game and Play of Johan Huizinga and Roger Caillois

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> NOTES DE RECHERCHE

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CONTEXTUALISER LES THÉORIES DU JEU DE JOHAN HUIZINGA ET ROGER CAILLOIS

Résumé. — Les réflexions de deux des théoriciens du jeu parmi les plus importants, Johan Huizinga et Roger Caillois, font régulièrement l'objet de citations et de discussions dans des recherches diverses. Cependant, dans les études sur le jeu, force est de constater que peu de chercheurs se référant à leurs travaux s'attachent à les replacer dans leurs contextes sociohistoriques ou dans l'œuvre globale de leurs auteurs. L'article vise à combler ce vide et montre que les théories des deux hommes impliquent une vision du monde qui leur est propre et ne peuvent par conséquent pas être reprises sans interroger leurs fondements, leurs implications ainsi que leurs enjeux.

Mots clés. — Johan Huizinga, Roger Caillois, jeu, théorie, culture, civilisation, sacré.

D epuis quelques décennies, l'importance prise par les industries du jeu et leur place de plus en plus visible dans les pratiques culturelles, notamment à la suite de l'essor des jeux vidéo, entraînent une multiplication des travaux scientifiques portant sur ces thèmes¹. Sous le terme « jeu » se retrouvent des phénomènes variés auxquels de nombreux auteurs ont tenté de donner des définitions. Comme dans tout travail de recherche, ces derniers font alors appel aux théories de leurs prédecesseurs qui ont abordé des thèmes similaires. Développées dans leurs ouvrages majeurs respectifs, *Homo Ludens* (1938) et *Les jeux et les hommes* (1958b), les théories de Johan Huizinga et de Roger Caillois font office de « passage obligé » pour les chercheurs sur le jeu. Cependant, force est de constater que si beaucoup, reprenant leurs théories, se sont attachés à les présenter afin de les critiquer, très peu ont cherché à les replacer dans leurs contextes sociohistoriques ou dans les œuvres globales de leurs auteurs. On trouve un exemple frappant de ce type dans le livre de Jesper Juul, *Half Real* (2005 : 30), qui juxtapose et compare plusieurs définitions du jeu sans jamais les recontextualiser et qui, à partir de cela, propose ce qu'il appelle un « modèle classique du jeu » (« classic game model »), capable, selon lui, d'expliquer au moins 5 000 ans de jeu dans l'histoire de l'humanité ... Face à cette proposition, il est possible d'objecter que « les jeux accompagnent les évolutions du social et celles-ci en retour modifient la nature du jeu et de ce qui s'y joue » (Schmoll, 2011 : 10). Ceci n'est d'ailleurs pas sans rappeler les propos de Jacques Henriot (1989 : 26-27) disant, au sujet du jeu, qu'« il n'est pas évident qu'il y ait "quelque chose" qui corresponde à ce que conçoivent les hommes qui appartiennent à des sociétés différentes, qui vivent à des époques différentes, qui parlent des langues différentes ». Pour aborder ces différences, il semble nécessaire de mieux comprendre les multiples enjeux et implications des définitions et des théories du jeu, à commencer par celles de Johan Huizinga et de Roger Caillois.

La nécessité de ce travail est apparue après avoir abordé les liens entre le jeu et le sacré dans un article écrit en collaboration avec Patrick Schmoll (2013). Nous constations alors que les deux auteurs établissaient un rapport entre ces deux notions et se situaient ainsi dans la continuité des travaux sur le sacré de l'école française de sociologie. C'est d'ailleurs sur ce rapprochement que porteront les premières critiques de Roger Caillois (1946) à l'encontre des théories de l'auteur néerlandais. Puis, il fera évoluer ses propres théories à la suite des échanges qu'il aura au milieu des années 50 avec Claude Lévi-Strauss. Il convient alors d'interroger la manière dont ces deux pensées se sont construites, leurs sous-entendus, leurs implications en termes de vision du monde, les enjeux liés à leur reprise ou la manière d'en faire une critique pertinente, pour qui veut saisir correctement la portée de ces travaux, les réutiliser ou les remettre en question. Ce questionnement participe de l'attitude réflexive que tout chercheur se doit d'adopter face aux théories qu'il utilise (Di Filippo, François, Michel, 2013 : 12-13). Aborder les fondements de ces relations entre

¹ Nous tenons à remercier les deux experts pour leur relecture attentive, la pertinence de leurs conseils ainsi que pour les références complémentaires qui ont permis de préciser le travail effectué dans cet article.

jeu et sacré permettra aussi de se demander si, dans ce cadre précis, on retrouve les caractères du sacré en dehors de la sphère religieuse (Boutaud, Dufour, 2013 : 8), en revenant aux définitions données par les chercheurs qui ont fondé la notion de sacré et comment celle-ci a influencé les définitions du jeu des deux auteurs présentés.

Leurs travaux seront traités de manière chronologique, en commençant par les textes de Johan Huizinga, afin de montrer que c'est, entre autres ressources, à partir de ceux-ci que Roger Caillois construisit les siens. L'objectif de la contribution est donc avant tout d'offrir une meilleure compréhension des fondements des théories des deux hommes et non de proposer une nouvelle théorie du jeu à partir de leurs travaux. Comme Camille Tarot (2003 : 270), on peut se poser la question de savoir si « des faits importants, des acquis sous-estimés attendent dans les échecs de grands esprits », car sans doute « il n'y a pas que des échecs dans leurs voies ».

Définitions et influences

Pour Johan Huizinga (1938 : 51), le jeu « est une action ou une activité volontaire, accomplie dans certaines limites fixées de temps et de lieu, suivant une règle librement consentie mais complètement impérieuse, pourvue d'une fin en soi, accompagnée d'un sentiment de tension et de joie, et d'une conscience d'"être autrement" que dans la "vie courante" ». À cette définition, Roger Caillois (1958b : 43) rajoute qu'elle est « imprudente » et que son issue est « incertaine ». Ces deux définitions ont pour intérêt de définir le jeu comme une activité sociale et orientent son étude vers des problématiques anthropologiques, sociologiques, voire historiques, traitant de l'organisation de l'espace social. Il s'agit donc moins d'étudier les jeux en tant qu'objet matériel (ce qui rapprocherait alors le terme de celui de jouets), que de considérer leur rôle dans la constitution des sociétés. Thierry Wendling (2000 : 27) note que Johan « Huizinga avance sans crier gare l'ébauche d'une théorie générale de la culture », qu'il évoque plus tard comme une « anthropologie générale » (Wendling, à paraître : 215). En plus de sa définition, Roger Caillois (1958b : 45-92) a proposé une typologie des jeux définissant quatre « catégories fondamentales » – l'*alea*, l'*agon*, l'*ilinx* et la *mimicry* – et deux principes – *ludus* et *paidia* – servant à catégoriser les attitudes mentales des individus propres à différents jeux. Ces théories permettent de réfléchir au rapport établi entre la notion de jeu et celles de culture ou de société, à condition de bien comprendre le sens que ces auteurs attachent à ces notions.

Leurs théories et définitions du jeu ont irrigué de nombreux travaux traitant de cet objet dans son aspect global (Henriot, 1989 : 171-175 ; Brougère, 2005 : 40), de jeux plus particuliers, tels le jeu d'échecs (Wendling, 2002 : 34-44), les jeux de rôle (Caira, 2007 : 206-210) ou les jeux vidéo (Juul, 2005 : 30 ; Taylor, 2006 : 88). Ces derniers servent aussi à interroger des thématiques plus générales comme le rapport que le jeu entretient à la culture (Genvo, 2009 : 9, 111 ; Mäyrä, 2008 : 20-21), les oppositions entre jeu et sérieux – importantes, notamment, chez Johan Huizinga (Bogost, 2007 : 57-55) – ou entre narratologie et ludologie dans l'étude

des jeux vidéo que Gonzalo Frasca (2003) a discutées à partir des catégories de *ludus* et de *paidia*. Les ouvrages des deux hommes ont aussi engendré des discussions en dehors de leurs disciplines d'origine. Pour Roger Caillois, citons par exemple Ruth Amossy (1991 : 137-138) qui évoque sa définition du jeu et la *mimicry* dans le cadre d'études littéraires, et François Jost (2006 : 184) dans ses études sur la télévision. Pour sa part, Johan Huizinga a suscité les réactions de spécialistes du droit en Italie (Andrini, 1991). S'ils ne font pas toujours l'unanimité, loin de là, ces travaux provoquent des discussions.

Comme nous le voyons, de nombreux chercheurs s'inspirent des travaux des deux auteurs, s'attachant parfois à un point particulier de leurs démonstrations, et remettent en question plusieurs des aspects de leurs définitions. Parmi les critiques les plus fréquentes, on retrouve l'idée selon laquelle le jeu n'est pas totalement séparé de la vie courante, ou encore une remise en question des combinaisons possibles dans la typologie de Roger Caillois. Cependant, ces critiques ne proposent pas de replacer les théories du jeu de ces auteurs, ainsi que les définitions de cette notion qui en découlent, dans leurs contextes historiques, ni dans leurs œuvres globales. Ce défaut est particulièrement présent chez des auteurs contemporains des *games studies*. Néanmoins, le présent travail doit aider à définir l'« horizon de pertinence » (Leleu-Merviel, 2010 : 174) des travaux de Johan Huizinga et de Roger Caillois, c'est-à-dire aider à prendre la mesure de leur validité afin de déterminer leurs apports possibles dans les études contemporaines sur le jeu.

Johan Huizinga, historien de la culture

Historien néerlandais, Johan Huizinga naît en 1872. Il vit la Première Guerre mondiale ainsi que les nombreux changements que connaît la société durant l'entre-deux-guerres, comme le développement des moyens de communication dont il évoquera les effets dans son ouvrage *Incertitudes* (Huizinga, 1935 : 77-79). Il observe également la montée du fascisme italien et du nazisme, en Allemagne. Ce dernier point est important car il explique un certain nombre d'orientations prises dans son ouvrage principal sur le jeu, traduit sous le titre *Homo Ludens. Essai sur la fonction sociale du jeu*, qui paraît dans sa langue originale en 1938. En effet, la clé de lecture de l'ouvrage repose dans le dernier chapitre, intitulé « L'élément ludique de la culture contemporaine » (Huizinga, 1938 : 268-292). Thierry Wendling (2000 : 27) précise que l'ouvrage fut « rédigé, en partie, sous la pression des événements » et qu'il « ne se comprend pas indépendamment du contexte de sa parution » (*ibid.* : 35). Il faut ainsi le lire comme « la contribution d'un grand intellectuel à la lutte contre le nazisme » (Wendling, à paraître : 213).

Avant cela, Johan Huizinga avait déjà publié plusieurs textes dans lesquels il mettait en avant les valeurs qu'il accordait à la culture et à l'histoire. Dans un de ses premiers ouvrages majeurs, *L'automne du Moyen Âge* (1919), il évoque les valeurs de cette période, telle la chevalerie, ou les rêves d'héroïsme et d'amour. Un autre ouvrage

important, dont la publication précède de peu celle d'*Homo Ludens*, est traduit sous le titre *Incertitudes. Essai de diagnostic du mal dont souffre notre temps* (1935) qui, en version originale, fait référence à la souffrance mentale et spirituelle (« *geestelijk lijden* ») de son époque. L'auteur y reviendra dans *À l'aube de la paix. Étude sur les chances de rétablissement de notre civilisation* (1945), intitulé en néerlandais *Geschonden wereld* (1945 : 4) soit, littéralement, « monde abîmé », mais le terme peut aussi renvoyer à l'idée de monde dégradé, violé, profane². Johan Huizinga s'intéresse donc à l'évolution des sociétés et aux effets de ces changements au cours du temps. Ainsi pouvons-nous comprendre ses textes comme ceux d'un observateur critique des transformations culturelles qui s'opèrent dans la société.

Période de l'entre-deux-guerres

Le contexte historique durant lequel Johan Huizinga (1938) écrit *Homo Ludens* est marqué par les développements techniques, la crise économique et, on l'a signalée, la montée du fascisme italien et du nazisme, plusieurs phénomènes qui vont grandement orienter ses réflexions dans une optique de contestation. Son attitude envers le régime nazi lui vaudra d'être enfermé durant trois mois dans un camp d'otages puis exilé en province. Il faut garder cela à l'esprit lorsque Johan Huizinga (1938 : 288) évoque, à la fin de son livre, l'idée d'une certaine perte de valeurs associée aux changements de société : « Peu à peu, nous en sommes arrivés à la conviction que la culture est fondée sur le jeu noble, et qu'elle ne peut manquer de teneur ludique, si elle veut déployer sa qualité suprême de style et de dignité. Nulle part, l'observance des règles établies n'est aussi indispensable que dans les relations entre peuples et États. Si ces règles sont violées, la société tombe alors dans la barbarie et le chaos ». Comme le montre cette citation, l'auteur associe la culture à un certain nombre de valeurs morales également présentes dans le jeu qu'il qualifie de « noble ». Ainsi semble-t-il définir un idéal pour la culture dans les conventions ou les normes qui, comme les règles du jeu, doivent être respectées, car elles définissent les conditions du respect mutuel entre les participants. Sans cela, les sociétés perdraient ce qui constitue leur plus grande qualité.

Pour mieux comprendre cela, il faut se tourner vers son essai précédent, *Incertitudes* (1935). Les titres des chapitres sont évocateurs. Voici quelques exemples : « Aspects problématiques du progrès » (*ibid.* : 55-59), « Affaiblissement général du jugement » (*ibid.* : 71-83), « Déclin du besoin critique » (*ibid.* : 85-98), « Renoncement à l'idéal de connaissance » (*ibid.* : 105-110), « Déclin des normes morales » (*ibid.* : 133-146), etc. Ces titres évoquent un retour en arrière, ou une régression par rapport à des qualités acquises avec le temps, ainsi qu'une forme d'abandon des valeurs que l'auteur considère comme importantes pour définir ce

² Dictionnaire en ligne *Van Dale*, Accès : <http://www.vandale.nl/opzoeken?pattern=Geschonden&lang=nf>. Consulté le 20/05/13.

qui fait le mérite d'une culture. Il consacre également un chapitre au puérilisme³ (*ibid.* : 175-187). Il « appelle puérilisme l'attitude d'une société dont la conduite ne correspond pas au degré de discernement et de maturité auquel elle est censée être parvenue, une société qui, au lieu de préparer l'adolescent à passer à l'âge viril, adapte sa propre conduite à celle de l'enfance » (*ibid.* : 175). Johan Huizinga utilise une métaphore anthropomorphique pour appuyer sa vision du progrès des sociétés vers un stade de raison. Le puérilisme est une forme d'inadaptation des comportements effectifs à ceux attendus qui créent une dissonance entre une projection idéale de ce que la société doit être selon l'auteur et ce qu'il observe. Tour à tour, Johan Huizinga y joint les intrigues politiques, les changements de nom de villes, les parades et marches au pas qui rassemblent des milliers d'hommes et qui suggèrent une « apparente grandeur et force trompeuse » (*ibid.* : 176), rajoutant que « le salut fasciste est proche du puérilisme général » (*ibid.* : 177). Quant aux États-Unis, ils sont le pays le plus puéril, mais cela est pardonnables car c'est aussi un pays plus jeune et à l'esprit plus « gamin » (*ibid.*) ; il est donc simplement plus naïf que les pays européens. Cette image exprime l'idée selon laquelle les sociétés acquièrent une forme d'expérience avec le temps et ce presque indépendamment de leurs membres. Ensuite, les exemples se multiplient de la même manière tout au long du chapitre jusqu'à dénoncer la devise allemande « *Blut und Boden* (sang et sol) » (*ibid.* : 185) comme n'étant rien d'autre qu'un slogan, c'est-à-dire qu'elle « appartient au domaine de la réclame » et, par conséquent, n'est pas sérieuse.

Pour l'auteur néerlandais, le danger survient lorsque le puérilisme entraîne une attitude sérieuse. Pour résumer, « la confusion du jeu et du sérieux, qui est au fond de tout ce qu'ici nous entendons par puérilisme, est de tous les signes du mal dont souffre la vie contemporaine, indéniablement le plus important » (*ibid.* : 186). Tout ce que l'auteur condamne dans le reste de l'ouvrage conduit au puérilisme qu'il dénonce, que ce soit les développements techniques pour lesquels l'homme n'est pas prêt ou la baisse des exigences concernant le regard critique qu'il est nécessaire de porter sur le monde. Comme le remarque Thierry Wendling (2000 : 36), la fonction créative que Johan Huizinga accorde à la culture par son aspect ludique se perd dans le puérilisme. S'appuyant sur les thèses d'Oswald Spengler, dont l'ouvrage *Le déclin de l'Occident* (1918-1922) était déjà cité comme étant un « signal d'alarme pour d'innombrables humains » (Huizinga, 1935 : 19), il « fait le départ entre d'un côté une culture jouée et noble et de l'autre un puérilisme dont il perçoit avec acuité le danger extrême » (Wendling, 2000 : 36). Chez Johan Huizinga, on constate une vision particulière du progrès qui a pour objectif de conduire à une société meilleure parce que ses membres auraient une conscience plus grande de ce qui constitue les bonnes attitudes à adopter, ce qui pourrait être comparé à une forme de sagesse. D'ailleurs, la confusion des attitudes liées au jeu et au sérieux est considérée comme le « mal » spirituel qu'évoque le titre de l'ouvrage. On observe alors un jugement moral dans l'analyse du changement et de l'évolution culturelle et sociale de l'auteur.

³ Le terme utilisé dans ce chapitre dans la version originale est « puerilisme », sans accent.

C'est aussi dans ce chapitre que l'on trouve des réflexions sur le jeu qui préparent celles d'*Homo Ludens* : « Dans ses phases primitives, la vie sociale se passe en grande partie en jeux. C'est une trêve temporaire des activités humaines habituelles se passant en divertissements, d'après des règles librement consenties et sous une forme fixe et déterminée » (Huizinga, 1935 : 180). Caractère séparé de la vie courante, réglé, librement consenti et dont la forme et les limites de temps et d'espace sont déterminées à l'avance, tels sont les traits principaux de la définition du jeu dans *Homo Ludens*. Mais, selon Johan Huizinga, le plus important est que « ce qui caractérise le plus essentiellement tout jeu véritable, c'est qu'à un moment donné, il cesse. Les spectateurs retournent chez eux, les acteurs déposent leurs masques, la représentation est finie. C'est ici qu'apparaît le défaut de notre temps. Dans bien des cas, le jeu, aujourd'hui, ne finit jamais. Ce n'est donc pas un jeu véritable. Il y a là une grave contamination entre le jeu et le sérieux : les deux sphères se sont mêlées » (*ibid.* : 181). Néanmoins, l'historien néerlandais suggère que, en y regardant de plus près, la confusion entre jeu et sérieux « a toujours existé dans une certaine mesure » (*ibid.*), surtout dans la psychologie animale, mais qu'on doit à la société occidentale d'avoir entremêlé les deux sphères à l'extrême. Les conséquences sont l'incapacité à reconnaître ce qui convient et ce qui est déplacé, l'absence de dignité personnelle, de respect d'autrui et de ses opinions qui aboutit à une forme d'égoïsme (*ibid.* : 182). Cela renvoie à la dimension morale de l'analyse de Johan Huizinga.

À la suite de cela, il fallait à l'auteur écrire un ouvrage qui permettrait de lutter contre ces dérives, contre cette contamination, qui n'est pas sans rappeler celle entre le sacré et le profane (voir *infra*), avec les moyens à sa disposition, c'est-à-dire l'érudition du professeur et l'écriture. Son âge avancé au début de la guerre et la position de son pays ne lui laissant, sans doute, que peu d'alternatives. C'est dans ce contexte qu'*Homo Ludens* voit le jour. Dans cet ouvrage, Johan Huizinga (1938 : 25) revient sur les difficultés que pose la distinction entre jeu et sérieux, qui, selon lui, reste « flottante ». Sa distinction sera moins stricte puisqu'il dira que « l'attitude ludique authentique et spontanée peut être celle du profond sérieux. Le joueur peut s'abandonner au jeu de tout son être » (*ibid.* : 41). On voit la difficulté que pose à l'auteur le vocabulaire employé, sans doute due à la polysémie des termes. Étudiant d'un point de vue philologique différentes acceptations des notions de jeu et de sérieux dans plusieurs langues, il arrive à la conclusion que les termes désignant le sérieux « représentent une tentative secondaire de la langue en vue d'exprimer la notion générale antithétique de la notion générale du jeu » (*ibid.* : 73). Là où le jeu est une notion en soi, qui ne se limite pas à désigner le non-sérieux, l'idée de sérieux, quant à elle, ne se comprend que dans son opposition avec le jeu. Cela fait de la notion « jeu » une notion première par rapport à celle de « sérieux ». Ce que Johan Huizinga justifie ainsi : « Le sérieux tend à exclure le jeu, tandis que le jeu peut fort bien englober le sérieux » (*ibid.*). C'est l'opposition entre jeu et « vie courante » qui deviendra primordiale dans son propos, cette dernière pouvant à tout moment faire irruption et rompre le jeu (*ibid.* : 42). Cette dualité sera au fondement de la théorie de l'émergence de la culture qu'il développera et qu'il convient d'éclairer.

Jeu et culture

Johan Huizinga (1938 : 112) écrit que « la culture ne naît pas en tant que jeu, ni du jeu mais *dans le jeu* ». Pour lui, notamment dans son aspect agonale de compétition, le jeu est une des composantes à la base de toute culture. Cependant, le terme « culture » pose des problèmes de définition, car son usage varie dans le temps, dans les espaces géographique et social, comme l'a montré Denys Cuche (1996). Aujourd'hui, il est donc difficile pour un chercheur de reprendre cette proposition à son compte sans interroger la définition que donne Johan Huizinga au terme « culture ». Bien entendu, la traduction du néerlandais au français pose un premier problème. De plus, dans *Homo Ludens*, à aucun moment cette question n'est posée clairement de cette façon – ce que note aussi Thierry Wendling (2000 : 29). Heureusement, ces deux obstacles peuvent être surmontés, car c'est l'un des sujets que l'auteur traite dans deux autres ouvrages, *Incertitudes* (1935) publié avant *Homo Ludens*, et *À l'aube de la paix* (1945), qu'il écrit juste après. L'auteur y détaille ce qu'il entend par culture et civilisation, deux termes dont les sens se recouvrent dans son propos. Il est donc possible de comprendre à quoi ces termes renvoient sous sa plume. Sa pensée restant cohérente entre les deux volumes, on peut en déduire qu'il n'a pas eu une vision différente lorsqu'il écrivait son ouvrage sur le jeu, et plusieurs points s'y trouvant vont le confirmer.

Dans le premier de ces ouvrages, Johan Huizinga (1935 : 41-53) consacre un chapitre aux « conditions essentielles de la culture ». Pour lui, elles se résument en trois points :

- « La culture exige en premier lieu un certain équilibre entre les valeurs spirituelles et matérielles. Cet équilibre permet le développement d'une disposition sociale qu'on estime supérieure et plus élevée que ne l'est la simple obtention du nécessaire ou la satisfaction de l'ambition » (*ibid.* : 43). L'auteur refuse de « considérer [...] comme culture les civilisations primitives, ou inférieures ou plus grossières » (*id.*), mais il ne veut pas non plus « tomber dans une admiration exclusive des civilisations déjà très avancées ou dans la surestimation d'un facteur culture unique, que ce soit la religion, l'art, le droit, le pouvoir politique ou autre chose » (*id.*). Selon lui, il faut qu'il y ait une forme d'*'harmonie des fonctions culturelles'* (*id.*). Bien qu'il s'intéresse aux changements culturels et qu'il désigne certaines sociétés comme inférieures, son approche n'est pas celle d'un évolutionnisme strict et unilinéaire comme on a pu le trouver au XIX^e siècle. Cependant, il prône bien l'idée qu'un développement doit s'opérer pour conduire à une forme d'équilibre que constitue la culture et qui doit faire sortir les sociétés d'un état d'origine primitif ;
- « Le deuxième trait fondamental de toute culture, c'est qu'elle doit comporter une aspiration » (*ibid.* : 44). L'auteur entend par là une « direction vers un but, un idéal de toute collectivité ». Il ajoute : « Que le but final se situe dans l'au-delà ou dans le proche avenir terrestre, dans la sagesse ou le bien-être, la condition pour

le poursuivre ou l'atteindre sera toujours la sécurité et l'ordre. La tendance naturelle de toute culture comporte toujours impérieusement le maintien de cet ordre et de cette sécurité. [...] L'aspiration vers une culture quelconque se manifeste toujours dans de nombreux systèmes d'autorité et de droit » (*ibid.* : 45). Toute culture doit donc s'accompagner d'un certain nombre d'orientations qui doivent être garanties par ses institutions. L'aspect ordonné de la culture se retrouve dans le jeu qui est à son fondement. À ce propos, dans *Homo Ludens* (Huizinga, 1938 : 114-129), on retrouve un chapitre, intitulé « Le jeu et la juridiction », sur les liens entre les jeux et le droit déjà annoncés dans le premier chapitre :

- enfin, la troisième condition : « Qui dit culture dit domination de la nature » (Huizinga, 1935 : 45). Par cela, l'auteur entend non seulement la nature comme environnement, mais aussi « la nature de l'homme » (*ibid.* : 47) afin de saisir « certaines obligations qui lui incombent » (*id.*). La culture est donc le dépassement d'une condition initiale. « L'obligation s'étend bientôt sous forme de tabous, de conventions, de règles de conduites, de cultes. L'emploi facile du mot *tabou* a conduit en de nombreux milieux à sous-estimer le caractère matérialiste du sens éthique des soi-disant civilisations primitives » (*id.*). Bien qu'utilisant ce terme en référence à l'école française de sociologie, il en condamne l'abus : « Encore laissons-nous de côté la tendance sociologique qui, pour juger tout ce qui s'appelle droit, morale, crainte de Dieu, verse le tout dans un récipient étiqueté "tabou" avec une légèreté toute moderne, même lorsqu'il s'agit d'une culture déjà développée » (*id.*). Johan Huizinga récuse l'amalgame entre certaines sociétés primitives et des sociétés plus avancées qui s'appuie sur l'usage de concepts génériques appliqués à toutes les formes de vies sociales. L'auteur met l'accent sur « la notion de service, indispensable à toute culture digne de ce nom » (*ibid.* : 48). Celle-ci commence « par le service de Dieu jusqu'à celui du prochain ». Dans cette citation, on découvre un auteur chrétien dont les interrogations sur les valeurs morales accompagnent la pensée scientifique. À ce titre, il convient de rappeler les dernières pages d'*Homo Ludens*, dans lesquelles Huizinga (1938 : 290-292) discute les propos de Platon qui font de l'homme un jouet des dieux. Selon le Néerlandais, seule l'éthique qui fonde la morale et la justice permet de dépasser les limites que la logique ne peut franchir pour définir s'il faut se comporter de manière sérieuse ou comme dans un jeu.

La position de Johan Huizinga quant à ce que la culture doit être est avant tout morale. D'ailleurs, l'historien rappelle qu'il est important de retrouver des « valeurs éternelles » (Huizinga, 1935 : 243) servant de guide au-delà « de l'évolution et du changement ». La morale apparaît avec la mise en place d'un ordre et d'obligations. Elle a une visée, un idéal et conduit à un équilibre matériel et spirituel, qui permet de se dégager d'un état initial chaotique. Rappelons que le chaos est aussi associé à la barbarie déjà évoquée à propos de la Première Guerre mondiale et qui s'oppose à l'idée de civilisation. Johan Huizinga craint une forme de régression qui renvoie à certaines conceptions évolutionnistes de la culture comme faisant partie de ce processus de civilisation. Celle-ci est liée à l'acquisition de bonnes mœurs,

elle s'oppose à la barbarie et démontre le progrès d'un peuple vers un état jugé meilleur. Encore faut-il que ce progrès soit maîtrisé. On retrouve cette idée dans *À l'aube de la paix*, dont le premier chapitre, intitulé « Terminologie du phénomène de civilisation » (Huizinga, 1945 : 11-24), est consacré au terme « civilisation » et où les termes « culture » et « civilisation » se rejoignent. Déjà évoquée, la vision anthropomorphique des sociétés se fonde sur l'idée que le processus de civilisation est une sortie d'un stade de jeunesse et dirige les peuples vers une forme de sagesse. Johan Huizinga (1938 : 37) fait ce même amalgame dans *Homo Ludens* à propos du jeu : « La communauté archaïque joue comme jouent l'enfant et l'animal. Cette opération, dès l'origine, est riche des éléments propres aux jeux : ordre, tension, mouvement, solennité, enthousiasme. Dans une phase plus évoluée seulement de la vie sociale s'associe à ce jeu la conception que quelque chose s'y trouve exprimé : une image de la vie ». L'idée d'*« image de la vie »* évoque la construction d'un sens particulier, à la fois signification et orientation, donné à des actions qui prennent place dans les formes évoluées de vie sociale. C'est par l'évolution de la vie sociale que permet le jeu que l'homme prendra conscience de la place qu'il occupe dans l'univers. Le jeu participe donc au fait de rendre possible une forme d'élévation spirituelle comme celle dont il est question dans la définition de la culture de l'auteur, qui aide à définir le sens que l'homme accorde à sa vie. Johan Huizinga poursuit alors : « Ce qui était un jeu dépourvu d'expression verbale prend une forme poétique. Dans la forme, et dans la fonction du jeu, qualité spécifique, la conscience qu'a l'homme d'être intégré dans le cosmos trouve sa première expression, la plus haute et la plus sainte. Dans le jeu pénètre peu à peu la signification d'un drame sacré. Le culte se greffe sur le jeu. Le jeu en soi fut toutefois le fait initial » (*ibid.*). Il est donc une condition pour rendre possible l'émergence des formes du sacré, qu'il précède, et il permet à l'homme de se situer. Cela signifie que l'ordre est une des qualités principales du jeu. Il permet de donner une place aux êtres et aux choses.

Jeu, sacré et cercle magique

On note avec intérêt que, dans *Incertitudes*, Johan Huizinga (1935) fait référence au terme « tabou » utilisé par les sociologues. Repris des travaux de Robertson Smith à la suite de James G. Frazer notamment (Borgeaud, 1994 : 397), l'idée de tabou a influencé les études de l'école française de sociologie. Elle est liée à celle d'interdits et, par conséquent, à celle de sacré (Hubert, Mauss, 1906 : 16-17). D'ailleurs, Roger Caillois (1939b : 77-125) consacre un chapitre entier, intitulé « Le sacré de respect : Théorie des interdits », de son ouvrage *L'homme et le sacré* à la question des interdits. Pour les sociologues français, considérée comme une différence « absolue » au-delà même de celle entre le bien et le mal (Durkheim, 1912 : 53), l'opposition entre sacré et profane sert de fondement à l'institution religieuse qui est la première des institutions (Tarot, 2003 : 271 ; 2012 : 340-341). Ces catégories servent à l'analyse de l'organisation de l'espace social et ces réflexions sont liées à la question des origines et de l'évolution qui conduit les peuples primitifs jusqu'aux

civilisations plus avancées (Borgeaud, 1994 : 389). Chez Johan Huizinga (voir *supra*), c'est le jeu qui, par son opposition à la vie courante, sert à poser des bases ordonnées de la culture et qui donne ses fondements au culte.

Un dernier point peut à présent être abordé, celui du lien entre le jeu et le sacré tel que proposé par Johan Huizinga. Cette idée se retrouve tout au long du premier chapitre d'*Homo Ludens*, intitulé « Nature et signification du jeu comme phénomène de culture » (Huizinga, 1938 : 15-50). En effet, chez Johan Huizinga (1938 : 24), tout comme le sacré s'oppose au profane, le jeu s'oppose à la vie courante ; « il offre un prétexte à s'évader de celle-ci pour entrer dans une sphère provisoire d'activité à tendance propre ». L'esprit ludique devient organisateur d'espace physique et social : « De même qu'il n'existe point de différence formelle entre un jeu et une action sacrée, à savoir que l'action sacrée s'accomplit sous des formes identiques à celles du jeu, de même le lieu sacré ne se distingue pas formellement de l'emplacement du jeu. [...] Ce sont des mondes temporaires au cœur du monde habituel, conçus en vue de l'accomplissement d'une action déterminée » (*ibid.* : 26). C'est aussi le terme « mondes » séparés, sacré et profane, que l'on retrouve chez Henri Hubert et Marcel Mauss (1899 : 301) lorsqu'ils émettent l'hypothèse selon laquelle le sacrifice sert à établir une communication entre les mondes profane et sacré, dont François-André Isambert (1982 : 226) relève qu'il apparaît chez les deux auteurs à la fois « comme champ sémantique, comme espace symbolique et comme système opératoire ». L'idée qui préside aux couples sacré/profane et jeu/vie courante est bien celle de deux cadres à la fois séparés et distincts, mais qui peuvent se rejoindre selon certaines modalités.

Pour Johan Huizinga (1938 : 26), le jeu précède le sacré et c'est en se développant en des formes plus évoluées qu'il pourra acquérir des significations sur lesquelles se grefferont des manifestations liées au sacré : « Quoi qu'il en soit, le jeu humain, dans toutes ses manifestations supérieures, où il signifie ou célèbre quelque chose, a sa place dans la sphère des fêtes et du culte, la sphère sacrée ». De cette façon, il acquiert un rôle et une utilité pour la communauté qui le pratique : « Comme action sacrée, le jeu peut servir la prospérité du groupe, mais alors d'une autre manière et avec d'autres moyens que l'acquisition immédiate d'éléments de subsistance » (*ibid.*). Ainsi, si le jeu est utile à la communauté, c'est qu'il n'est pas séparé de la vie courante au sens strictement littéral. Son rôle est plutôt d'ordre spirituel par opposition à l'idée d'éléments de subsistance comme la nourriture ou les biens matériels. Les rituels et les cultes adoptent la forme d'un jeu et en gardent par conséquent de nombreux traits. Ils permettent de donner formes à des choses normalement invisibles (*ibid.* : 32-33). Le jeu comme principe fondamental participe à faire de l'homme un être spirituel au-delà de sa nature terrestre. Cela renvoie à l'idée de culture développée dans *Incertitudes* selon laquelle les valeurs spirituelles y jouent un rôle au côté des valeurs matérielles et que, pour qu'il y ait culture, l'homme doit dominer la nature. Ainsi comprend-on mieux le rôle du jeu pour lutter contre la souffrance mentale et spirituelle (« *geestelijk* ») qu'évoque le titre original de l'ouvrage.

Notons aussi que, selon Johan Huizinga, c'est par le jeu et son aspect de compétition que l'homme réalise son aspiration à s'élever au-delà des éléments terrestres, et ce, indépendamment des formes que prend la religion dans différentes sociétés (*ibid.* : 113). Le jeu constitue une forme d'expérience subjective pour les participants, qui se construit dans le rapport à la communauté. Encore une fois, un rapprochement peut être effectué⁴ avec la notion du sacré comme force active découlant de ce qu'Émile Durkheim (cité in : Isambert, 1982 : 242-243) appelle la « communion des consciences » qui doit, selon lui, avoir « un certain degré d'unité, d'intimité, et que les forces qu'elle dégage soient assez intenses pour tirer l'individu hors de lui-même et l'élever à une vie supérieure ». Comme le sacré, le jeu sert à l'homme à dépasser le stade de son simple état d'être terrestre et naturel en en faisant un être spirituel. Encore une fois, cela s'inscrit dans la continuité de la définition de la culture de son ouvrage précédent.

Ces nombreux rapports entre jeu et sacré permettent de mieux comprendre les sous-entendus de la définition du jeu telle que Johan Huizinga (1938 : 51) la propose : « Le jeu est une action ou une activité volontaire, accomplie dans certaines limites fixées de temps et de lieu, suivant une règle librement consentie mais complètement impérieuse, pourvue d'une fin en soi, accompagnée d'un sentiment de tension et de joie, et d'une conscience d'"être autrement" que dans la "vie courante" ». De cette définition, nous pouvons retenir quatre éléments importants : le jeu est une action volontaire, c'est-à-dire qu'on y participe par choix ; il est limité dans le temps et l'espace ; il est réglé ; il se situe hors de la « vie courante ». Pour ainsi dire, il organise les conventions sociales en définissant des espaces, des temporalités, les manières d'être et d'agir et leur donne du sens. Par son opposition à la vie courante, le jeu adopte donc chez Johan Huizinga les qualités que le sacré possédait chez d'autres chercheurs, notamment ceux de l'école française de sociologie. Tout comme chez Émile Durkheim (1912 : 65) pour qui l'opposition sacré/profane donnait naissance à la religion qui était la première de toutes les institutions, chez le Néerlandais, le jeu peut être à l'origine de l'ensemble des phénomènes qui seront explorés dans son ouvrage : compétition, droit, poésie, sagesse, mythes, philosophie, art, guerre. Comme les durkheimiens souhaitaient donner à la notion de sacré une valeur trans-historique et transculturelle (Isambert, 1982 : 215), Johan Huizinga (1938 : 52) rappelle que tous les peuples jouent « de manière notamment similaire ».

Mais c'est bien dans la forme que le jeu et le sacré se retrouvent, et Johan Huizinga le rappelle à plusieurs reprises : « Parmi les traits formels du jeu, la séparation locale de l'action par rapport à la vie courante en constituait le plus important. Un espace fermé est isolé, soit matériellement soit idéalement, séparé de l'entourage quotidien » (*ibid.* : 40). Ou encore, « formellement, la fonction de cette délimitation est exactement la même, qu'elle vise à des fins sacrées ou au jeu pur et simple. La piste, le court de tennis, le terrain de marelle, l'échiquier ne diffèrent pas formellement du temple ou du cercle magique » (*ibid.* : 40). L'historien se limite bien à une homologie de forme et non pas à une homologie de sens comme le lui reprocheront Roger Caillois (1946) et Émile Benveniste (1947), en lui faisant un faux procès.

⁴ J. Huizinga ne cite pas lui-même É. Durkheim, c'est nous qui proposons ce rapprochement.

On voit apparaître le terme « cercle magique » qui a fait couler beaucoup d'encre, notamment depuis sa reprise par Katie Salen et Eric Zimmerman (2003) dans leur ouvrage *Rules of Play*. La principale critique faite à l'encontre de cette notion est qu'un jeu n'est jamais totalement isolé du reste du monde. Cela peut paraître évident, mais Eric Zimmerman (2012) est revenu sur ce problème. Comme il l'écrit, personne n'a jamais cru cela, et surtout pas Johan Huizinga lui-même, puisque – comme nous l'avons vu – celui-ci disait qu'il pouvait servir à la prospérité de la communauté. Mais cette notion semble en quelque sorte servir d'*« épouvantail »* (*« Straw man »* – *ibid.*) qu'agitent les chercheurs du domaine. En outre, Eric Zimmerman insiste sur le fait que personne ne pense sérieusement qu'un jeu puisse exister en dehors de tout environnement. Simplement, en tant que *game designer*, penser un jeu comme un système clos s'avère parfois nécessaire, mais uniquement dans un horizon de pertinence particulier. Dans ce cas, il s'agit donc d'une simplification conceptuelle qui permet de penser les limites ou les marges d'une production.

On voit mieux comment ces lectures complémentaires permettent d'envisager les implications qui sous-tendent l'étude du jeu de l'historien. Grâce à elles, on comprend qu'une telle conception de la notion « culture » n'est pas compatible avec des conceptions plus neutres sur le plan moral, telles des positions de relativisme culturel ou encore des conceptions pragmatiques et interactionnistes comme celle d'Howard S. Becker (1999 : 21) pour qui la culture est un ensemble d'attentes et de ressources constamment actualisées, servant à coordonner les activités des individus, et qui varie sans cesse en fonction des situations. Chez le sociologue américain, elle n'a pas vocation à conduire les sociétés vers quelque chose de « meilleur » ou à fixer un idéal. Cette position situationniste et constructiviste serait plus proche des travaux sur le jeu de Jacques Henriot (Genvo, 2013 : 2). Pour qui veut construire un cadre heuristique cohérent, il est donc important de s'arrêter sur ces définitions de concepts centraux tel celui de culture. La position de Johan Huizinga traduit d'abord des idéaux. Bien sûr, il n'y a rien de mal à vouloir faire évoluer la société dans un sens positif, seulement, il faut garder à l'esprit et exposer clairement qu'il s'agit d'une position morale, donc loin d'être neutre, méritant d'être débattue sur le plan des valeurs.

Roger Caillois, le jeu et le sacré dans la sociologie française

Sociologue, essayiste, critique littéraire et écrivain français, Roger Caillois est né en 1913⁵. Il est agrégé de grammaire et fait office de personnage multi-casquettes dans le champ intellectuel. Jeune, il adhère au mouvement surréaliste d'André Breton avant de s'en retirer publiquement à la suite de l'affaire des haricots

⁵ Le lecteur pourra se référer aux archives vidéo sur la vie de R. Caillois : *Archives du xx^e siècle. Roger Caillois. Partie 1*, 1977 (accès : <http://www.ina.fr/video/CPA77058863>; consulté le 05/05/14) et *Archives du xx^e siècle. Roger Caillois. Partie 2*, 1977 (accès : <http://boutique.ina.fr/video/histoire-et-conflits/autres-conflits/CPA77058864/roger-caillois-2eme-partie.fr.html>; consulté le 05/05/14).

sauteurs⁶ (Caillois, 1974a : 11). Par ailleurs, il suivra les enseignements de sociologie religieuse de Marcel Mauss, ainsi que les cours de Georges Dumézil (Felgine, 1994 : 86-89). C'est de là que lui vient son intérêt pour le sacré qui le rattache à Émile Durkheim, Henri Hubert et Robert Hertz, comme il le mentionne dans la préface de *L'homme et le sacré* (Caillois, 1939b : 19) et dans *Approches de l'imaginaire* (1974a : 58). Chez Roger Caillois aussi, les questions relatives au sacré sont liées à celle des origines et à ce qui conduit ceux qu'on appelle parfois encore les peuples primitifs à la civilisation. Avec notamment Georges Bataille et Michel Leiris, il fonde en 1937 le Collège de sociologie dont il écrit le manifeste (Caillois, 1974a : 70-72) dans lequel il affirme vouloir proposer une sociologie « activiste » du sacré que les membres nomment d'ailleurs « sociologie sacrée », dont le but est de redonner de la vigueur à leur société. L'idée de communauté tient à ce titre une place centrale dans les recherches des membres de ce collectif. Plus tard, Roger Caillois (1974a : 58) expliquera leurs influences : « Nous étions certes d'accord sur l'importance éminente, sinon décisive, du sacré dans les émotions des individus comme dans la structure des sociétés ». On discerne alors ce croisement entre les approches de l'école française de sociologie et celle, phénoménologique, de Rudolf Otto⁷. Enfin, notons que Roger Caillois regroupera ses ouvrages *L'homme et le mythe* (1938), *L'homme et le sacré* (1939b) *Les jeux et les hommes* (1958b) et quelques autres – de moindres importances pour la présente contribution – sous une même étiquette qu'il appellera sa « parenthèse sociologique » (Caillois, 1974a : 60). Dans la préface à la troisième édition de *L'homme et le sacré*, écrite en 1963 (Caillois, 1939b : 14), il indique que l'annexe intitulée « Le jeu et le sacré » aboutit à son livre *Les jeux et les hommes*. Cela influe sur les objectifs de ses théories du jeu et la portée qu'il souhaite leur donner. Il ne faut donc surtout pas négliger cet aspect afin de comprendre les liens que l'auteur établissait lui-même entre ses différents travaux.

Le ludique et le sacré

Au vu des éléments évoqués, il semble évident que Roger Caillois ne pouvait pas rester insensible au livre de Johan Huizinga (1938)⁸. En proposant une théorie du jeu en rapport avec le sacré et comme étant au fondement de toute organisation sociale, ce dernier provoque l'intérêt du sociologue français. Rappelons que pour ce dernier, le sacré se définit avant tout par son opposition au profane

⁶ Les « haricots sauteurs » ou « pois sauteurs » du Mexique sont des graines dans lesquelles une espèce de papillon pond ses œufs. Après éclosion, l'activité des larves à l'intérieur fait sautiller les graines. En 1934, à Paris, A. Breton et R. Caillois sont tous deux face à ce type de graines. Tandis que R. Caillois souhaite en ouvrir une pour découvrir la chenille et percer l'énigme, A. Breton s'y oppose car il préfère continuer à jouir du mystère. Cette controverse nommée l'affaire (ou querelle) des haricots sauteurs fut révélatrice des divergences existant entre les deux hommes quant à la conduite à adopter face au merveilleux.

⁷ Pour une explication des différences entre les deux approches, voir notamment F.-A. Isambert (1982), P. Borgeaud (1994) et C. Tarot (2003, 2012).

⁸ T. Wendling (à paraître : 213) note également que, en plus du lien avec le sacré, l'ancre politique des théories de J. Huizinga face au nazisme avait pu faire écho aux motivations du Collège de sociologie.

dans une conception religieuse du monde (Caillois, 1939b : 23). Deux « milieux complémentaires » ou deux « mondes » qui « ne se définissent rigoureusement que l'un par l'autre » (*ibid.* : 23-24) se constituent en se fondant sur cette distinction. On retrouve les termes d'Henri Hubert et de Marcel Mauss (1899). Roger Caillois désigne le sacré comme une propriété ou une qualité, stable ou éphémère, accordée à des êtres, des choses, des espaces, des temps, qui contribue à définir l'attitude qu'il convient d'adopter dans le rapport que les individus entretiennent avec leur environnement (*ibid.*). La distinction sacré/profane sert donc à comprendre les constructions de sens qui définissent des normes et guident l'action des individus. Cette conception particulière de l'étude des sociétés oriente la conception du jeu de Roger Caillois vers une approche qui intègre le sens accordé au jeu au-delà d'une simple étude de forme.

Selon Thierry Wendling (à paraître : 209-210), les premières évocations du thème du jeu apparaissent chez Roger Caillois (1939a : 645-693) dans un texte de 1939 consacré à la fête⁹. Le sociologue y évoque les jeux de hasard qui, durant le temps de fête, sont des activités de risque et de dilapidation qui s'opposent directement au temps de travail où l'on accumule des richesses de manière lente et sûre. Il est possible d'établir un rapprochement entre cette proposition et le caractère improductif du jeu dont Roger Caillois (1958b : 36) dit qu'il « est l'occasion d'une dépense pure ». Faisant partie du temps sacré, le jeu s'oppose à la vie courante. Pour lui, la fête est aussi liée au sacrifice (Caillois, 1939a : 646) et il essaie de mettre en lumière « l'atmosphère sacrificielle » de la fête. Il fait une nouvelle fois référence aux théories du sacré d'Henri Hubert et de Marcel Mauss (1899). De plus, il puisera dans les enseignements de Marcel Granet, ainsi que dans d'autres travaux de Marcel Mauss sur le rapport entre jeux et mythes cosmologiques, effectués à la fin des années 30, où il cherchera des exemples pour nourrir sa critique du livre de Johan Huizinga (Wendling, à paraître : 215). Son intérêt pour l'auteur néerlandais pourrait, entre autres raisons, lui être venu d'une présentation de Denis de Rougemont au Collège de sociologie (*ibid.* : 211-212). Celui-ci y présentait le tournoi chevaleresque comme un jeu du mythe et y évoquait les travaux du Néerlandais sur le Moyen Âge. Des parcours individuels s'entrecroisent avec des intérêts pour des thématiques particulières qui circulent ainsi entre chercheurs. Cependant, chez Roger Caillois, la thématique du jeu restait encore marginale et s'intégrait à d'autres réflexions sur le sacré et son expression dans la fête. Il faut attendre l'après-guerre pour que les choses changent.

⁹ Ce texte deviendra peu après la partie consacrée à la fête dans *L'homme et le sacré* (Caillois, 1939b) et subira des modifications lors de rééditions ultérieures de l'ouvrage après-guerre (Hollier, 1979 : 642). Il est aussi possible de noter que R. Caillois (1958b : 62-63) reprend des exemples tirés de son livre *L'homme et le mythe* sur le mimétisme animal pour nourrir sa réflexion sur la *mimicry*. Stéphane Massonet (1998 : 192) note une évolution dans l'orientation générale de ses recherches car « en lui permettant de considérer la différence de nature entre jeu et sacré, le jeu réactualise l'ensemble de ses recherches sur le mimétisme des insectes, non plus dans l'horizon du mythe et du sacré, mais dans la perspective d'un ludisme qui va bientôt déborder la sphère sociologique ou anthropologique vers celle d'un jeu cosmique ».

Intitulé « Le ludique et le sacré », le premier article que Roger Caillois consacre entièrement à la question du jeu, est publié en 1946 dans la revue *Confluences*. Il sera republié sous un titre légèrement différent dans la seconde édition de *L'homme et le sacré*, parue en 1950. L'auteur y reprend et critique la thèse principale de Johan Huizinga sur le lien entre jeu et sacré. En effet, pour le Français, les deux phénomènes ont en commun le fait d'être « un espace clos délimité, séparé du monde et de la vie » (Caillois, 1946 : 69). Les deux concepts se rejoignent donc sur le plan de la forme. Cependant, contrairement au sacré, « le ludique, activité libre par excellence, est le profane pur » (*ibid.* : 75). Sacré et jeu s'opposent alors de façon symétrique par rapport à la vie courante dont ils se distinguent (*ibid.*). Une théorie similaire, dont Roger Caillois prendra connaissance plus tard, sera développée quasi simultanément par Émile Benveniste (1947 : 164) pour qui le jeu et le sacré « ont en fait une structure symétrique, mais opposée » et dont la conséquence est que « le sacré est sur-réel, le jeu, de l'extra-réel » (*ibid.*). Le jeu ne serait « donc au fond qu'une opération désacralisante » (*ibid.* : 165) qui en ferait du sacré inversé. C'est ici sur le plan du sens que le sociologue et le linguiste opèrent une distinction. Roger Caillois (1946 : 68) voit là « le défaut de cet ouvrage admirable » en rappelant qu'« il étudie des structures externes bien plus que les attitudes intimes qui donnent à chaque comportement sa signification la plus précise ». Il faut rappeler que, pour le Français, qui s'inspire également des travaux de Rudolf Otto (1917), le sacré attire grâce à une sorte de « don de fascination » (Caillois, 1939b : 27) et que son « monde [...] , entre autres caractères, s'oppose au monde du profane comme un monde d'énergies à un monde de substances. D'un côté, des forces ; de l'autre, des choses » (*ibid.* : 44). Cette définition renvoie à la théorie du *mana*, élaborée par Robert H. Codrington et reprise par Henri Hubert et Marcel Mauss (1902-1903 : 101-102) dans leur théorie de la magie, selon laquelle il s'agit d'une force active et efficace qui imprègne toute chose et leur donne une certaine valeur. Roger Caillois (1946 : 72) appellera dans son article sur le jeu que le sacré est « contenu pur : force indivisible, équivoque, fugitive et efficace ». C'est pour cette raison qu'elle nécessite d'adopter face à elle une attitude empreinte de respect, tandis que dans le jeu, au contraire, l'homme serait créateur et enjoint à la détente, au repos ou à la distraction.

Dans *Les jeux et les hommes*, Roger Caillois (1958b : 31) revient aux thèses de Johan Huizinga qu'il considère comme « fécondes à la recherche et à la réflexion » pour avoir notamment « démontré l'importance [du rôle du jeu] dans le développement même de la civilisation » (*ibid.*). Il s'accorde alors avec l'historien néerlandais sur l'idée d'établir une théorie générale de l'origine et de l'évolution des sociétés humaines. Cependant, il précise que, pour qu'il y ait jeu dans le cas de jeux fondés sur le mystère, le secret ou le travestissement, il faut que « la part de la fiction et du divertissement l'emporte » (*ibid.* : 34). Roger Caillois confirme ainsi un rapport entre des formes analogues que peuvent prendre le jeu et le sacré, mais, par la même occasion, il renouvelle sa critique selon laquelle l'attitude face à l'activité doit être celle de la détente plutôt que du respect révérencieux. D'ailleurs, le chapitre sur « La corruption des jeux » (*ibid.* : 101-122) rappelle le

risque de mélange et de contagion par le profane qui menace parfois le sacré, et inversement, et que Roger Caillois (1939b : 32-33) avait déjà développé dans un autre ouvrage. Selon le sociologue, il peut aussi y avoir contamination entre le jeu et le « monde réel ». On retrouve ici la critique faite dans son premier article.

Cette réflexion suivra Roger Caillois (1967 : vii-viii) jusque dans l'encyclopédie qu'il dirige dans la collection de la Pléiade. Dans cet ouvrage, l'auteur (*ibid.* : 9) évoque l'hypothèse selon laquelle certains jeux sont des survivances d'éléments culturels, faisant partie d'institutions laïques ou sacrées qui, privées de leur sens car éloignées de leur culture d'origine, ont dégénéré en jeu. On pourrait penser que cette dégénérescence, notamment du sacré dans le jeu, serait un signe de l'évolution des sociétés. Cependant, l'homme nuance son propos en prenant des exemples dans lesquels les enfants imitent des éléments de culture contemporaine sur le mode ludique. À ce sujet, il cite les pistolets à eau qui imitent les armes à feu, ou le fait que des enfants catholiques peuvent jouer à la messe. Il en conclut « que le jeu n'est nullement le résidu anodin d'une occupation d'adulte désaffectée, encore qu'il en perpétue éventuellement le simulacre, quand elle-même est périmee. Il se présente avant tout comme une activité parallèle, indépendante, qui s'oppose aux gestes et aux décisions de la vie ordinaire par des caractères spécifiques qui lui sont propres et qui font qu'il est un jeu » (*ibid.* : 11). Ainsi confirme-t-il son idée selon laquelle sacré, vie courante et jeu constituent des cadres distincts qui, bien qu'adoptant parfois des formes similaires, se distinguent sur le plan du sens qu'on leur accorde. Or, Johan Huizinga évoquait uniquement la forme des rites et du culte qui dérivait du jeu lorsque celui-ci évoluait, mais ne traitait pas d'une similitude de sens. D'ailleurs, il avait conscience des différences de signification. La critique de Roger Caillois et d'Émile Benveniste semble donc mal placée après une relecture attentive. Néanmoins, elle permet de relever que, bien avant de proposer sa typologie des jeux, Roger Caillois offre une réflexion sur la place du jeu dans les processus de civilisation et sur son rôle d'élément organisateur de la vie sociale. Mais, contrairement à Johan Huizinga, chez le Français, le jeu n'a pas la primauté sur le sacré : il s'agit de deux sphères d'activité à la fois « parallèles », distinctes et opposées sur le plan du sens.

La querelle avec Claude Lévi-Strauss

Entre son premier article et son ouvrage *Les jeux et les hommes*, certaines choses ont évolué dans la pensée de Roger Caillois. Au milieu des années 50, le sociologue (Caillois, 1954, 1955a, 1955b) s'oppose à Claude Lévi-Strauss (1955a, 1955b) dans une critique de l'ouvrage *Race et histoire* (Lévi-Strauss, 1952) : « Sur le plan des idées, il s'agit pour Caillois de rappeler la supériorité de l'Occident et pour Lévi-Strauss de défendre une approche des civilisations dégagée de tout ethnocentrisme » (Wendling, 2010 : 31). Cette polémique et ses conséquences ont été brillamment analysées par Michel Panoff (1993) et Thierry Wendling (2010) sur le fond comme sur la forme. Nous ne reviendrons donc pas sur les

détails de l'affaire. Cependant, on peut noter que les deux auteurs affichent une préférence nette pour Claude Lévi-Strauss¹⁰. Ce que nous suggérons est qu'un autre élément, qu'il ne faut pas négliger, peut intervenir dans cette discussion, car elle se déroule précisément durant les années où Roger Caillois (1955c) commence à élaborer de manière plus concrète ses théories des jeux et sa typologie. Si, pour Thierry Wendling (2010 : 29-30), cette opposition a notamment eu pour conséquence un désintérêt de l'ethnologie pour le jeu durant la période structuraliste, il faut aussi mettre cette querelle en lien avec les orientations prises par Roger Caillois pour élaborer sa théorie des jeux qui s'ancrent dans la continuité de ses réflexions sociologiques sur le sacré. En effet, cette polémique se produit dans un « contexte de filiations intellectuelles complexes » (Wendling, 2010 : 30) où la question du sacré et les conceptions du monde qu'elle sous-tend, comme celle d'une forme d'évolutionnisme, ont pu influencer le débat. D'un point de vue de sociologue des religions, Camille Tarot (2012 : 348) suggère que le succès du structuralisme a provoqué un désintérêt pour le sacré dans la deuxième moitié du xx^e siècle. En croisant ainsi les recherches de Camille Tarot avec celles de Thierry Wendling, on trouve un argument de plus, qui semble confirmer le sens de la lecture à donner aux travaux de Roger Caillois et ses effets dans le champ de la recherche française. Une séparation s'opère : d'une part, les études sociologiques sur le jeu poursuivent l'étude du sacré ; d'autre part, l'ethnologie se concentre sur le symbolique et des objets d'étude tels les mythes, la parenté et l'organisation sociale (Wendling, 2010 : 47).

Une sociologie à partir des jeux

C'est dans ce contexte de polémique avec les ethnologues que Roger Caillois (1958b : 142) constitue sa théorie des jeux qui aboutit à l'ouvrage *Les jeux et les hommes* dont il présente ainsi le programme : « Je n'entreprends pas seulement une sociologie des jeux. J'ai l'idée de jeter les fondements d'une sociologie à partir des jeux ».

Dans son article, « Le ludique et le sacré », Roger Caillois (1946 : 67) reprochait déjà à Johan Huizinga de ne pas avoir abordé « les diverses attitudes mentales que supposent les différentes variétés de jeux : d'adresse, de force, de combinaison, de hasard, etc. ». C'est ce qui le conduit à proposer presque dix ans plus tard (Caillois, 1955c) une typologie des jeux où l'on retrouve ses catégories fondamentales : l'*agon*, l'*alea*, la *mimicry* et l'*ilinx*. Dans ce texte, l'*ilinx* tient une place un peu à part. Arrivant à la fin du texte, dans les mots de l'auteur, il est d'abord symptomatique de la modernité : « Il reste une dernière espèce de jeux qui ne semble pas pouvoir

¹⁰ C'est dans ses remarques sur *Les jeux et les hommes* (Caillois, 1958b) que M. Panoff (1993 : 77) critique le plus R. Caillois, se demandant si c'est par sa « paresse », son « outrecuidance », ou son « aversion pour les ethnologues professionnels » que l'auteur pêche. M. Panoff mettra plusieurs fois les erreurs de R. Caillois sur le compte du manque de travail rigoureux qui, selon lui, le caractérise.

rentrer dans celles-ci et qui peut passer pour la seule innovation proprement moderne en ce domaine : ceux qui reposent sur la poursuite du vertige » (Caillois, 1955c : 85). Bien qu'il reconnaise que les sensations de vertige sont sans doute recherchées depuis longtemps, il affirme : « Il ne faut donc pas s'étonner qu'on ait dû attendre l'âge industriel pour voir le vertige devenir véritablement une catégorie du jeu » (*ibid.*). C'est deux années plus tard, dans un article publié dans sa revue *Diogène* (Caillois, 1957 : 136), qu'il parlera de sociétés « gouvernées par les forces conjuguées du masque et de la possession, ou, si l'on préfère, de la pantomime et de l'extase (*mimicry* et *ilinx*) et qui n'ont pas encore accédé à une vie collective fondée sur des institutions où la concurrence réglée et la compétition organisée jouent un rôle essentiel ». L'auteur poursuivra cette théorie dans un article publié l'année suivante (Caillois, 1958a), qu'il reprendra d'ailleurs presque mot à mot¹¹ dans *Les jeux et les hommes* (Caillois, 1958b : 45-92), où l'*ilinx* devient, avec la *mimicry*, la catégorie renvoyant aux « sociétés à *tohu-bohu* » (*ibid.* : 171). Il observe alors que « chaque fois qu'une haute culture parvient à émerger du chaos originel, on constate une régression des puissances de vertige et de simulacres » (*ibid.* : 193). Roger Caillois semble encore peu au clair sur l'idée qu'il se fait du vertige, qui apparaît, d'abord, comme un effet de la modernisation des techniques, avant de devenir une catégorie de jeu des sociétés primitives tendant à disparaître avec le progrès. De plus, il établit un parallèle avec sa théorie du sacré selon laquelle l'ordre du cosmos émerge du chaos originel grâce aux forces sacrées et alors seulement « l'ère du *tohu-bohu* est close, l'histoire naturelle commence, le régime de la causalité normale s'installe » (Caillois, 1939b : 139). On peut donc déduire que, à ses yeux, les sociétés qu'il appelle « à *tohu-bohu* » seront plus proches de l'état originel chaotique.

Comme on le voit, en proposant sa sociologie « à partir des jeux », Roger Caillois souhaite faire valoir un modèle d'évolution des sociétés, ou de civilisation, qui viennent appuyer les arguments qu'il opposait précédemment au relativisme culturel développé par Claude Lévi-Strauss, contre lequel il s'était insurgé. Stéphane Massonet (1998 : 187) estime que « cette seconde partie [de l'ouvrage *Les jeux et les hommes*] constitue une réponse implicite au débat sur le relativisme culturel qui l'opposa quelques années auparavant à Claude Lévi-Strauss ». Michel Panoff (1993 : 75), qui avait bien relevé ce problème, allait plus loin dans sa critique, dénonçant le « manque d'originalité intellectuelle », le fait qu'« il est difficile d'y trouver des idées personnelles » (*ibid.*) et que l'*« appareil érudit est ici d'une légèreté déconcertante »* (*ibid.*). Michel Panoff lui reproche de ne s'appuyer que sur des théories datées, faisant fi de tous les progrès, aussi bien en anthropologie qu'en zoologie, depuis le xix^e siècle¹². D'ailleurs, il signale que, en présentant le jeu

¹¹ Le lecteur peut remarquer, non sans une pointe d'humour, que R. Caillois reprend une bonne partie de son texte précédent. La phrase tirée de l'article de 1955 se voit ajouter un unique mot et devient alors : « Il ne faut donc pas s'étonner qu'on ait dû souvent attendre l'âge industriel pour voir le vertige devenir véritablement une catégorie du jeu » (Caillois, 1958a : 95 ; nous soulignons).

¹² On peut noter que R. Caillois (1938 : 82-85) établissait déjà un lien entre la mante religieuse et les mythes des femmes dévoreuses d'hommes, ou aux organes sexuels dentés, sous prétexte d'une

comme un « phénomène total », Roger Caillois se situe plus dans la lignée de Marcel Mauss que Claude Lévi-Strauss qui, pourtant, signe la préface de *Sociologie et anthropologie* (Panoff, 1993 : 75-76). Or, c'est par la médiation et dans la continuité de Johan Huizinga (1938 : 90), qui s'appuyait lui-même sur les travaux de Marcel Mauss (1923-1924) sur le *Potlatch*, que Roger Caillois présente le jeu. Alors, bien que « l'idée [soit] originale et d'une grande portée » (Panoff, 1993 : 80-81), elle n'est pas de lui. On la retrouve déjà tout entière chez l'auteur néerlandais.

Finalement, on peut avancer que l'ouvrage de Roger Caillois développe et élaboré certains aspects déjà présentés par Johan Huizinga. De sa définition en six points du jeu (libre, séparé, réglé, incertain, improductif, fictif) quatre étaient déjà présents dans les travaux de l'auteur néerlandais. Concernant l'improductivité, nous avons vu que Johan Huizinga situait les apports du jeu sur le plan spirituel et non matériel. De même, il avait déjà présenté les bases de ce qui allait constituer les catégories de l'*agon* et de la *mimicry* chez l'auteur français, l'*alea* ne pouvant apparaître comme une catégorie fondamentale ou un type de jeu puisque, pour l'historien, le jeu est un facteur organisateur; voire ordonnateur; de vie sociale. Cela renvoie directement à la deuxième condition nécessaire de la culture selon sa définition. D'ailleurs, dans les exemples qu'il utilise, les jeux de dés peuvent servir à régler une compétition et une lutte (Huizinga, 1938 : 82). Le hasard est donc une forme d'incertitude fondamentale, et le jeu, sous ses diverses formes, une manière de faire face à celle-ci ou de l'utiliser, donc d'avoir une prise sur elle. Ici, Roger Caillois montre une mauvaise compréhension de la pensée de Johan Huizinga en mélangeant les niveaux d'interprétation, mais, plus grave encore, ce biais rend incohérent sa propre pensée et permet d'émettre une nouvelle critique à l'encontre de sa typologie. En effet, le hasard pur ne peut pas être considéré comme principe ordonnateur puisque, par définition, il est son contraire et se fonde sur l'indétermination et l'incertitude. Il renvoie alors à la question des limites de la perception humaine¹³.

Enfin, l'*ilinx* passe du statut de type de jeu foncièrement moderne à celui de type primordial, comme s'il s'agissait de justifier l'évolution des sociétés par un équilibre d'oppositions binaires, *mimicry* et *ilinx* du côté des « sociétés à tohu-bohu », *alea* et *agon* du côté des « sociétés à comptabilité » (Caillois, 1958b : 172). C'est sur ce point qu'il se démarque de l'auteur néerlandais, en proposant une classification des sociétés selon leurs jeux. Malheureusement, le résultat semble précéder la démonstration et l'opposition proposée peut paraître artificielle. D'ailleurs, c'est le reproche le plus important à faire à sa classification des jeux, puisqu'elle constitue une typologie généralisée posée *a priori* et ne correspond à aucune véritable démonstration, mais à une synthèse empreinte de présupposés (Wendling, 2002 : 43). On retrouve exactement le problème qu'il soulève lui-même à propos de sa théorie du sacré, à savoir, le « côté fallacieux et grossier d'une telle entreprise » (Caillois, 1939b : 17). Cette dernière présente des règles

continuité dans le vivant, le mythe se situant dans le prolongement des instincts primordiaux.

¹³ À ce sujet, voir les travaux d'Ivar Ekeland (1991).

qui ne s'appliqueraient jamais intégralement, ses conclusions ne sont valables que pour la moyenne des faits, ses descriptions sont sorties de leurs contextes et ne sont pas beaucoup plus que des abstractions (*ibid.* : 18). Ces critiques pourraient s'appliquer de la même façon à sa typologie des jeux. Bien que dans le cadre d'un essai, proposer des hypothèses soit une méthode de travail féconde, à aucun moment, lui-même ne la présente ainsi. Ceci conduit à des reprises de ses théories sans remise en question des fondements mêmes de sa classification tels que nous les avons présentés. Tout au plus, on objectera une critique des six points de sa définition du jeu et les limites des alliances possibles qu'il propose entre les différents types de jeu, ces critiques se faisant d'ailleurs souvent sans une remise en contexte historique de ses travaux (Triclot, 2011 : 46). Ainsi a-t-on parfois l'impression que l'on reproche à Roger Caillois de ne pas tenir compte de jeux qui n'existaient pas à son époque, tels les jeux vidéo.

Comme on le voit, *Les jeux et les hommes* participe en grande partie à cette guerre que Roger Caillois (1958b : 183) fait aux ethnologues, « savants dont la crédulité est, hélas ! infinie, et, en outre, intéressée, envoutée ». Comme le relève Michel Panoff (1993, 80-81), « ce qui restait encore implicite dans la querelle qu'il avait cherchée à Lévi-Strauss quatre ans plus tôt s'exprime désormais sans détour ni nuances ». D'ailleurs, les traces de cette querelle resurgiront bien des années plus tard lorsque Roger Caillois (1974b) accueillera Claude Lévi-Strauss à l'Académie française. Il ne pourra s'empêcher de rappeler ce qu'il pense des ethnologues, reprenant de nombreux arguments déjà présents dans sa critique de *Race et histoire*. La remise en question de ses théories du jeu et de sa classification doit alors conduire à une discussion de son modèle sociologique général d'évolution des sociétés et, à l'inverse, des conceptions différentes de modèles sociaux généraux devront nourrir la critique des catégories qu'il propose. Son opposition duelle renvoie à la problématique déjà ancienne de l'altérité et du regard porté sur les autres peuples que Tzvetan Todorov (1989) a résumée sous la formule « Nous et les autres ». Qu'on les considère barbares dans l'antiquité, païens au Moyen Âge, sauvages à la renaissance, primitifs au XIX^e siècle ou « sociétés à tohu-bohu » au milieu du XX^e siècle, l'idée principale qui se dégage est celle d'une différence constitutive ou d'une forme de distance dans le regard que l'on porte sur eux, c'est-à-dire de la construction d'une forme d'altérité. Dans son discours de réception à l'attention de Claude Lévi-Strauss, Roger Caillois (1974b) parle encore d'« hommes de nature » et de « population sauvage » lorsqu'il évoque l'idée selon laquelle l'ethnographie « se présente comme la seule science qui contribue à détruire son objet [...]. Car les sujets de l'étude ne peuvent pas ne pas rejoindre les savants qui les étudient ». Selon lui, toute technologie plus efficace qu'une autre finit toujours par supplanter la précédente, qu'il s'agisse de la hache d'acier qui remplace celle de pierre ou de l'arrivée du béton et de l'électricité dans la construction d'habitation. Roger Caillois défend l'idée d'une marche de l'histoire vers le progrès et l'échelle de valeurs sur laquelle il se situe est celle du progrès technique occidental. Dans *Les jeux et les hommes*, il traitait déjà des « transitions » (Caillois, 1958b : 199-216) d'un type de société vers l'autre qui permettait la sortie du piège que constituent

la pantomime et l'extase et qui « n'est rien d'autre que la naissance même de la civilisation » (*ibid.* : 195). À propos de cette bipartition, Stéphane Massonet (1998 : 202) rappelle qu'elle a valu à Roger Caillois les critiques de plusieurs ethnologues puisqu'il insiste « sur le passage d'une forme sociale à une autre, comme accès à la civilisation, comme si les sociétés primitives à masques, tout en formant un "type original de culture", n'étaient pas des formes de civilisations ».

On pourra opposer la vision relativiste de Lévi-Strauss (1952 : 32) considérant « qu'il n'existe pas de peuple enfant » et que, dans l'histoire, si l'échelle de mesure est le temps, des peuples aux coutumes variées sont contemporains les uns des autres sans pour autant que l'on doive considérer que certains vivent jusque-là au ralenti. Il n'y a pas qu'une façon de comparer les sociétés entre elles et, comme l'écrit Franz Boas (1928 : 207), « les valeurs de nos idéaux sociaux vont ainsi gagner en précision par une étude rigoureuse et objective des cultures étrangères »¹⁴. Il faut aussi souligner que de nombreux peuples n'ont pas simplement adopté les techniques occidentales, mais ont souvent été contraints de se conformer à de nouveaux modèles culturels. Dans une approche qui se voudrait relativiste, il n'est donc pas possible de simplement diviser les sociétés en deux types en fonction des jeux qui y sont joués ; chacun a ses spécificités et peut proposer des catégories de jeu qui lui sont propres. Chaque activité ludique doit ainsi être recontextualisée dans un temps et un espace particuliers. Nous rejoignons ici les propositions faites par Patrick Schmoll (2011) et Jacques Henriot (1989) citées plus haut. Ainsi le port du masque lors de carnavales ou les fêtes foraines dans les sociétés contemporaines n'est-il pas une simple « résurgence », ni le signe d'un retour en arrière à des sensations primordiales, mais pose plutôt la question de leur transformation, de leur fonction et de leur place par rapport à d'autres activités. Par exemple, on peut chercher à comprendre, comme le fait Paul Yonnet (1999), comment s'organise l'équilibre entre temps de travail contraint et temps de loisir plus libre. On peut également envisager les processus d'emprunts ludiques entre différentes cultures. Il ne s'agit plus alors d'une étude d'états, mais de celle de processus et d'activités toujours en mouvement. Ainsi évite-t-on d'essentialiser certains concepts ou certaines catégories, comme le fait Roger Caillois. À ce propos, notons que les catégories sacré et profane ne s'appliquent pas rigoureusement à toutes les sociétés. François-André Isambert (1982 : 265-266) note que « non seulement cette fameuse notion commune n'a pas l'invariabilité qu'on lui a prêtée [...] mais encore que le sacré, comme concept de sociologue, ne correspond pas au mode de structuration de toutes les religions ». Il serait alors possible d'appliquer son conseil au concept du jeu : « Dès lors, loin de vouloir se donner des concepts génériques applicables en tous temps et en tous lieux, quitte à y faire entrer tant bien que mal les faits les plus proches de nous, mieux vaut se saisir des relations caractéristiques qui se dégagent de nos contacts avec la réalité, en reconnaissant leurs racines dans notre expérience proche et en posant seulement ensuite la question de leur application possible à des domaines plus éloignés » (*ibid.* : 266).

¹⁴ « The values of our social ideals will thus gain in clarity by a rigid, objective study of foreign cultures ».

Une autre position relativiste, que l'on retrouve dans certaines approches pragmatiques, consiste à voir chaque individu comme étant construit par ses expériences spécifiques. Ainsi chacun est-il différent et chaque situation particulière. La question du sens ou de la fonction des activités ludiques se pose au niveau de l'interaction et le sens donné aux situations y est construit de manière subjective et locale. Chaque activité devient alors une situation particulière dont le sens est sans cesse retravaillé. L'activité ludique prend son sens dans son rapport à la biographie des acteurs et dans un contexte particulier et non dans un modèle général de société.

La question du modèle général

La portée universelle que Johan Huizinga et Roger Caillois cherchent à donner à leurs études respectives risque de conduire à la dérive consistant à placer sous une même notion des phénomènes variant dans le temps et l'espace. Cela est principalement dû au fait d'utiliser un ou des termes polysémiques avec une portée générale et à celui de donner un caractère universel à une vision ethnocentrique. Il faut donc remettre en question leurs définitions *a priori* du jeu, ainsi que la volonté des deux chercheurs de réunir sous un même vocable des phénomènes somme toute variés. Les deux auteurs ne distinguent pas de façon nette les deux sens du mot « jeu » : objet ou activité. Au contraire, ils jouent sur l'ambiguïté sémantique du terme¹⁵. Jacques Henriot (1969, 1989) reviendra sur la nécessité de penser cette spécificité en proposant une théorie dans laquelle il distingue « structure ludique » et « attitude ludique », en plus de différencier de manière analytique le « jeu », le « jouer » et le « jouant ». Néanmoins, il peut être intéressant de se demander si il est possible d'envisager toute l'organisation sociale à partir d'une base commune. Il semble difficile de croire que ce fondement puisse se résumer à l'étiquette du sacré ou même du jeu, car cela dépend précisément de la manière de définir ces termes dans la culture des auteurs. Une manière plus prudente de procéder serait de voir si en partant du cas d'étude qu'est le jeu, ou un jeu, on peut mettre en lumière des mécanismes d'une organisation sociale générale, comme le propose Jacques Henriot (1989 : 32) pour qui le jeu « constitue l'un des modèles les plus efficaces, les plus directement opératoires pour l'analyse des situations sociales ». Il faudrait alors procéder par comparaison ou contraste avec d'autres activités humaines pour voir les points communs qui pourraient être dégagés de l'analyse, ainsi que les spécificités de chacune. On pourrait essayer de déterminer si convient d'appeler « jeu » la relation entre un individu et son environnement dans une activité donnée, ayant une histoire et qui s'organise à l'intérieur de règles, de normes ou de conventions servant à la cadrer. Par exemple, une telle démarche contribuerait aux débats sur des questions d'ordres plus généraux sur l'opposition entre déterminisme et libre arbitre ou sur les rapports entre individus et société.

¹⁵ Nous remercions Sébastien Genvo pour ses remarques.

Conclusion

Plusieurs raisons expliquent les choix de composition théorique de Roger Caillois, mais il est indéniable que son intérêt pour l'étude du sacré l'a fait réagir à la lecture d'*Homo Ludens* (Huizinga, 1938), tant l'ouvrage invite à une discussion sur les liens entre cette notion et celle du jeu telle que proposée par Johan Huizinga. Qu'entre son premier article sur ce thème, en 1946, et son ouvrage de 1958, d'autres raisons soient venues s'y greffer et y donner une tournure particulière (raisons exposées notamment par des ethnologues comme Michel Panoff et Thierry Wendling) ne fait que confirmer ces hypothèses. L'explication d'Olivier Caïra (2007 : 208) selon laquelle « Caillois, comme Huizinga, ne justifie son objet d'étude, peu légitime à l'époque, qu'en le rattachant à d'autres, jugés sérieux », est alors insuffisante. Comme nous l'avons vu, les implications et les enjeux de leurs travaux respectifs sont bien plus importants que cela. Ils sont le reflet d'une vision du monde propre aux deux auteurs, et leurs théories du jeu sont au service de cette vision à partir de laquelle ils essaient chacun de proposer une théorie générale de l'organisation sociale. C'est sur ce fondement que leurs propositions doivent être empruntées et non pas simplement en citant quelques lignes de définition décontextualisées. On comprend alors mieux l'erreur de Jesper Juul (2005 : 197) qui veut proposer un modèle général du jeu (« game ») qui serait valide depuis l'an 3000 av. J.-C., mais qui ne va pas jusqu'à poser la question de l'élargissement possible de ses réflexions à toutes les activités sociales.

L'analyse a permis de montrer qu'il est nécessaire de revenir aux fondements de ce qui constitue la pensée de ces auteurs en discutant les principes qui leur servent à définir des notions comme celles de culture, de civilisation ou leur manière d'appréhender les sociétés dans leur diversité. Par sa polysémie, la notion de jeu nécessite aussi une recontextualisation importante des travaux des chercheurs qui l'emploient. Il sera alors possible de voir quels sont les points sur lesquels il est possible de s'en rapprocher. Ainsi convient-il de savoir si l'on s'ancre dans une conception morale et spirituelle de la culture lorsqu'on discute les théories de Johan Huizinga, et de questionner la répartition entre les « sociétés à tohu-bohu » et les « sociétés à comptabilité » lorsqu'on évoque la typologie de Roger Caillois. Ces questionnements permettront d'inscrire les travaux dans des problématiques plus générales en sciences humaines et sociales et permettront de souligner les ruptures entre plusieurs types d'approches. Dans les recherches Johan Huizinga comme dans celles de Roger Caillois, l'idée de jeu renvoie à une certaine vision de l'évolution des sociétés qui s'inscrit dans la filiation de l'école française de sociologie et dans sa volonté de recherche de phénomènes totaux. Mais cette analyse montre aussi qu'une étude de la filiation des concepts, bien que nécessaire, est sans doute insuffisante pour expliquer les influences multiples que constitue tout travail de recherche.

En tant que productions intellectuelles, les recherches sont toujours l'œuvre d'individus en interaction avec d'autres et sont pris dans un contexte historique, social et culturel particulier. De plus, la pensée d'un auteur se construit sur un

temps parfois long durant lequel elle peut s'affiner ou même prendre des directions différentes en fonction des événements particuliers, liés au monde scientifique aussi bien qu'à des événements extérieurs. Cette réflexion permet alors d'envisager les manières d'interroger les conditions possibles d'une pratique interdisciplinaire en sciences humaines et sociales autour des questions liées à la notion de jeu, en tenant compte des différences fondamentales dans les conceptions du monde et du rôle des individus dans l'organisation de l'espace social étudié.

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Improving empathy: is virtual reality an effective approach to educating about refugees?

A study on whether virtual reality can foster empathy towards refugee issues among young students

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Abstract

Prompted by the need to educate host communities about refugees as a way to promote a two-way process of integration, this dissertation is an empirical investigation into the use of virtual reality in the context of education about refugees. In particular, it focuses on the question of whether virtual reality could effectively foster empathy towards refugees. The emphasis on empathy is motivated by two main reasons: first, empathy can be taught and, second, it can lead to altruism. Inspired by the success of the 360-degree video *Clouds Over Sidra*, which helped virtual reality earn the title of 'empathy machine', this study asked 107 middle and high school students to watch the above-mentioned *Clouds Over Sidra* and the multimodal video *Step into a Refugee Camp* and compare the two media experiences. Overall, the results indicated VR's immersive quality can enhance compelling content by eliciting both emotional and cognitive empathy and help develop perspective-taking capacities. They also demonstrated that, at least in the short term, the empathic reaction stimulated some forms of altruism expressed in the commitment to offer a personal contribution to improve the refugees' situation.

Keywords

education, two-way integration, empathy, virtual reality, altruism, responsibility, refugees

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1. Introduction

This paper seeks to explore the effectiveness of virtual reality¹ in fostering empathy towards refugees in the school environment. In order to achieve this objective, a study was conducted in which 107 middle and high school students were asked about their understanding of refugee issues and invited to compare two media experiences: the 360-degree video *Clouds Over Sidra*² and the multimodal video *Step into a Refugee Camp*.³

The choice to focus on how to elicit empathy was first triggered by President Obama's statement: '[t]he biggest deficit that we have in our society and in the world right now is an empathy deficit'.⁴ This observation was later substantiated by a 2011 study of American college students which discovered a decrease in empathy over the last 30 years.⁵ Given that the presence of refugees is increasingly fuelling tension and fear into receiving societies,⁶ this is a cause of significant concern. As leading researchers such as Batson have shown, empathy is capable of improving societal attitudes towards stigmatised groups.⁷ Hence, it could contribute to changing today's hostile climate towards refugees and perhaps even create a more open mindset towards them.

Just as empathy can decrease (e.g. the current 'deficit') it can also increase.⁸ This possibility supports the core of this paper, which aims to investigate innovative ways to stimulate empathy. In this context, one medium was often cited especially for its effectiveness: VR, which in 2015 earned the grand title of 'the ultimate empathy machine'.⁹

While the term 'virtual reality' can imply different levels of immersion and manipulation of a virtual environment, here it refers to the immersive viewing experience created by 360-degree videos. These are normally filmed with a multi-lens camera or a collection of cameras. This allows filmmakers to shoot overlapping fields of view at the same time which are then stitched together in order to create videos offering a panoramic experience. These types of videos can be accessed with simple and affordable viewers equipped with lenses for immersive visuals which work with smartphones.¹⁰ Although these devices cannot track the viewers' movements, they nonetheless give them the feeling of being immersed in the scene they are seeing through 3D vision. In other words, their location remains fixed, but they can look all around and control where to explore and for how long.

360-degree videos became very popular in 2015, when YouTube made it possible to upload and view them on its platform. Media companies soon started paying attention to the potential of VR to engage their audience. New VR divisions were added to large organisations such as CNN, The New York Times Company and The Economist Group to name a few.¹¹ The UN too became part of this trend with the creation of United Nations Virtual Reality (UNVR) and the release of the eight-minute long 360-degree video used in this study: *Clouds Over Sidra*, a documentary about the life of a 12-year-old Syrian girl in the Za'atari camp in Jordan.¹² It premiered at the World Economic Forum in Davos, Switzerland, in January 2015.¹³ Since then it has been screened at several charity events in over 40 countries as it has turned out to be 'twice as effective in raising funds'.¹⁴

This effectiveness has been attributed to the immersive experience offered by VR which, by giving viewers the feeling of being present on the scene, can elicit empathy. Such a claim, however, remains hotly debated. Some researchers, including Jeremy Bailenson, the founding director of Stanford University's Virtual Human Interaction Lab, are convinced VR drives empathy. Others, however, remain sceptical and even question the desirability of fostering empathy in the first place.¹⁵

Given the positive impact VR could have in changing attitudes towards refugees, it seemed worthwhile to contribute to this debate by expanding the research on VR's effectiveness in eliciting empathy to refugee studies, in particular to the

1 Hereinafter 'VR'.

2 G Arora and C Milk, 'Clouds Over Sidra' (2015) WITHIN <<http://with.in/watch/clouds-over-sidra>> accessed 4 October 2019.

3 D Acosta, 'Step into a Refugee Camp' New York Times (New York, 30 December 2016) <<https://www.nytimes.com/2016/12/30/world/middleeast/syrian-refugees-on-the-war-their-camp-and-your-questions.html>> accessed 4 October 2019.

4 Cited by C S Dweck, K Schumann and J Zaki, 'Addressing the Empathy Deficit: Beliefs About the Malleability of Empathy Predict Effortful Responses When Empathy Is Challenging' (2014) 107(3) Journal of Personality and Social Psychology 475.

5 ibid.

6 See Ipsos, 'Global Views on Immigration and the Refugee Crisis' (2016) <<https://www.ipsos.com/sites/default/files/migrations/en-uk/files/Assets/Docs/Polls/ipsos-global-advisor-immigration-and-refugees-2016-charts.pdf>> accessed 4 October 2019.

7 C D Batson et al., 'Empathy, Attitudes and Action: Can Feeling for a Member of a Stigmatized Group Motivate One to Help the Group?' (2002) 28(12) Personality and Social Psychology Bulletin 1656.

8 Dweck, Schumann and Zaki (n 4).

9 C Milk, 'How Virtual Reality Can Create the Ultimate Empathy Machine' (2015) TED <https://www.ted.com/talks/chris_milk_how_virtual_reality_can_create_the_ultimate_empathy_machine?language=en> accessed 4 October 2019.

10 For this study, the viewer used was Google Cardboard <<https://vr.google.com/cardboard/>> accessed 4 October 2019.

11 See J Vincent, 'CNN Launches Global VR Journalism Unit and New 360-degree Mobile Content' The Verge (8 March 2017) <<https://www.theverge.com/2017/3/8/14852256/cnn-virtual-reality-vr-news-team>> accessed 4 October 2019.

12 United Nations Virtual Reality, 'Clouds Over Sidra' (2015) <<http://unvr.sdgactioncampaign.org/cloudoversidra/>> accessed 4 October 2019.

13 ibid.

14 ibid.

15 S Illing, 'The Case Against Empathy' (20 August 2018) Vox <<https://www.vox.com/conversations/2017/1/19/14266230/empathy-morality-ethics-psychology-compassion-paul-bloom>> accessed 4 October 2019.

area of education about refugees. Its possible role in opening the minds of younger generations towards challenging issues such as welcoming refugees, combined with the little attention it has received so far in the academic discourse, makes it an ideal area to start an investigation.

In this context, education is not simply understood as a process of knowledge acquisition, rather as the transmission of skills and behaviours aimed at developing a responsible and ethical approach to complex social phenomena.¹⁶ One of these skills is empathy. The 2016 UNESCO report on global education emphasises that '[f]or education to truly be transformative, "education as usual" will not suffice...[L]earning needs to foster thinking that is more...empathic'.¹⁷

However, this paper does not propose to present a recipe for fostering empathy. Rather, it seeks to provide an analysis of how VR experiences can generate empathic feelings in order to support quality teaching and learning. Hence, the research questions this paper addresses are: can VR be effective in fostering empathy within the framework of education about refugees? If so, what are the elements contributing to this? And will empathy lead to action?

The relevancy and urgency of these questions is further highlighted by a general failure of schools to provide a space for intercultural dialogue.¹⁸ Unfortunately, this often results in predominant attitudes of discrimination, xenophobia and stereotyping standing in the way of integration, thereby denying refugee children an adequate learning environment.¹⁹ This is especially concerning given that the school is in many cases the place where different communities come into contact with one another and can engage in the process of a two-way integration based on the idea that both the host community and the newcomers should get to know each other.²⁰

Therefore, the meta-purpose of this paper²¹ revolves around the need to educate about refugees as a way to realise integration. Embracing the argument that:

[w]hile critique and elaboration of the theorization of integration processes is a key goal of the field of refugee studies, so too are means of making the insights of theory accessible to local actors and policy makers²²

this paper strives to be a useful piece of research for educators in helping them with their task of teaching about refugees. At the very least, it hopes to inspire a discussion on how to prepare young minds to integrate refugees into their communities.

16 G Cain and Y Carnellor, 'Roots of Empathy': A Research Study on its Impact on Teachers in Western Australia' (2008) 2(1) *Journal of Student Wellbeing* 52.

17 UNESCO, 'Global Education Monitoring Report' (2016) <<http://unesdoc.unesco.org/images/0024/002462/246230E.pdf>> accessed 4 October 2019.

18 Lifelong Learning Platform, 'Integrating Refugees and Migrants Through Education' (2016) <http://llplatform.eu/ll/wp-content/uploads/2016/09/llplatform_integration-through-education_position-paper.pdf> accessed 4 October 2019.

19 M Mendenhall, S Garnett Russell and E Buckner, 'Urban Refugee Education: Strengthening Policies and Practices for Access, Quality, and Inclusion Insights and Recommendations from a 16-Country Global Survey and Case Studies in Beirut, Nairobi, and Quito' (2017) <<https://www.tc.columbia.edu/refugeeeducation/resources/Urban-Refugees-Full-Report.pdf>> accessed 4 October 2019.

20 A Ager and A Strang, 'Refugee Integration: Emerging Trends and Remaining Agendas' (2010) 23(4) *Journal of Refugee Studies* 589.

21 A Schmidt, "'I Know What You're Doing" Reflexivity and Methods in Refugee Studies' (2007) 26(3) *Refugee Survey Quarterly* 82.

22 Ager and Strang, 'Refugee Integration: Emerging Trends and Remaining Agendas' (n 20).

2. Education about refugees, empathy and virtual reality: A literature review of these topics and how they interact

2.1 *Education about refugees: Integration as a two-way process*

According to the conceptual framework proposed by Ager and Strang to identify the main domains of integration, education appears together with housing, employment and health as one of the four markers and means of integration. These are markers because successful outcomes in these areas indicate a certain level of integration. At the same time, they are means because they have the potential to lead to the achievement of integration.²³

This study, however, proposes to explore the concepts of integration, education and refugees from a different angle. Instead of focusing on educating refugees, it revolves around the idea of educating receiving communities about refugees as a means of advancing integration. Consequently, integration is understood as a two-way process or more precisely as 'a process of mutual accommodation and adjustment by both newcomers and the larger society'.²⁴ Within the realm of education, this translates into ensuring refugees familiarise themselves with their host society while the latter makes an effort to get to know its new members.

Integration as a two-way process was first introduced by the Council of Europe, which in 1998 stated: '(Integration is)...a two way process (whereby) immigrants change society at the same time as they integrate into it'.²⁵ Subsequently, it was explored by several authoritative scholars such as Ager and Strang.²⁶ Their latest paper on the topic, 'Refugee Integration: Emerging Trends and Remaining Agendas',²⁷ appeared in the 2010 special issue on integration of the *Journal of Refugee Studies*. This article, along with several others published in the same issue, shows support for the argument that the receiving community is also called upon to learn about the refugees living in their midst for integration to be successful.²⁸

While this notion is met with consensus in the academic world, it does not reflect how the public perceives integration. As Castle et al. illustrate, both popular attitudes and policies tend to see integration as a one-way process based on the assumption it is the refugees' responsibility to adjust.²⁹ Analysing the situation in Britain, Zetter et al. make a comparable argument by underlining how integration rhetoric often translates into assimilation policies.³⁰ Along similar lines, Vasta points out the two-way concept is missing the part where 'the dominant, established groups also take the responsibility to integrate into an ethnically and culturally diverse society'.³¹

2.1.1 *Education as intercultural dialogue*

Educational programmes aimed at integration were initially focused on increasing young refugees' opportunities to enter the labour market.³² While this approach contributed to their economic integration, it failed to address the cultural component of integration, thus leaving newcomers as the only party responsible for adapting to the new society.³³

However, as schools were increasingly identified as forums to encourage the process of socialisation between the host community and the newcomers,³⁴ attention started being paid to 'the importance of dialogue and exchange about both the host culture and the culture and history of the other community'.³⁵ Hence, at the beginning of the 21st century, a new educational trend based on the principle of intercultural dialogue began to take shape in response to the growing diversity introduced by migration into Western societies. A few papers commissioned by European

23 A Ager and A Strang, 'Understanding Integration: A Conceptual Framework' (2008) 21(2) *Journal of Refugee Studies* 166.

24 The 2010–2011 report by Citizenship and Immigration Canada on Plans and Priorities for Citizenship and Immigration Canada (2010) <<http://www.unhcr.org/52403d389.pdf>> accessed 4 October 2019.

25 Cited by Ager and Strang, 'Refugee Integration: Emerging Trends and Remaining Agendas' (n 20) 602.

26 See A Ager and A Strang, 'Indicators of Integration: Final Report' (2004) Home Office Development and Practice Report 28 <<http://webarchive.nationalarchives.gov.uk/20110218141321/http://rds.homeoffice.gov.uk/rds/pdfs04/dpr28.pdf>> accessed 4 October 2019, Ager and Strang, 'Understanding Integration: A Conceptual Framework' (n 23) and Ager and Strang, 'Refugee Integration: Emerging Trends and Remaining Agendas' (n 20).

27 Ager and Strang, 'Refugee Integration: Emerging Trends and Remaining Agendas' (n 20) 600.

28 See for instance M McKeary and B Newbold, 'Barriers to Care: The Challenges for Canadian Refugees and their Health Care Providers' (2010) 23(4) *Journal of Refugee Studies* 523 and G Mulvey, 'When Policy Creates Politics: The Problematising of Immigration and the Consequences for Refugee Integration in the UK' (2010) 23(4) *Journal of Refugee Studies* 437.

29 S Castles, M Korac, E Vasta and S Vertovec, 'Integration: Mapping the Field' Report of a project carried out by the Centre for Migration and Policy Research and Refugee Studies Centre (University of Oxford 2002) 113.

30 R Zetter, D Griffiths and N Sigona, 'Immigration, Social Cohesion and Social Capital: What Are the Links?' (2006) <<https://www.jrf.org.uk/report/immigration-social-cohesion-and-social-capital-what-are-links>> accessed 4 October 2019.

31 E Vasta, 'The Controllability of Difference: Social Solidarity and Immigrant Integration' (2009) COMPAS Working Paper 71, 19.

32 D Faas, C Hadjisoteriou and P Angelides, 'Intercultural Education in Europe: Policies, Practices and Trends' (2014) 40(2) *British Educational Research Journal* 313.

33 Vasta (n 31) 19.

34 Faas, Hadjisoteriou and Angelides (n 32) 310. See also Ager and Strang, 'Refugee Integration: Emerging Trends and Remaining Agendas' (n 20).

35 Faas, Hadjisoteriou and Angelides (n 32) 312.

institutions such as the Council of Europe,³⁶ but also by global organisations such as UNESCO,³⁷ promoted intercultural education as the tool to achieve balance between cultural diversity and social cohesion.³⁸ 2008 was even proclaimed the year of intercultural dialogue and programmes such as 'intercultural cities' were launched.³⁹ All these initiatives brought about a most remarkable 'shift...in the statement that culturally diverse society, and intercultural and multicultural education is for all students, not only for minority and immigrant students'.⁴⁰

While intercultural education has the potential to contribute to the realisation of integration as a two-way process, the real issue is that it has been only marginally implemented into national school curricula. The 2008 study, 'Intercultural Education in Schools', carried out by the European Parliament reported 'little engagement in implementing European policies on intercultural education' in school programmes which have continued to reflect a national and monocultural way of thinking.⁴¹ Beyond Europe, a 2016 global report by UNESCO based on 78 countries around the world found that only 50 per cent of them included concepts such as intercultural education in their school curricula.⁴²

Despite this failure to embed intercultural education into national school programmes, the idea of advancing integration through the education of host communities about refugees still finds support, at least in the academic world. In 2017, for instance, the journal *Intercultural Education*, a global forum for education in plural societies, dedicated an entire issue to the subject of teaching about refugees.⁴³ In her editorial, Nenadovic refers to recent political events, such as Brexit and the election of Donald Trump, as signs of rising populism and consequent lack of willingness to move towards solutions of integration.⁴⁴ This increasingly hostile climate has been fuelling already existing concerns about the presumed incompatibility of the refugees' cultures and religions with those of the receiving countries. These have provided the motivation to address the need to educate host communities about refugees. Although exploring different realities in different countries, all articles come to the same conclusion as to the urgency of starting to insert more refugee-related topics into the Western educational system.

However, while the subject of education about refugees has been broached in the discipline of education, it has not yet been tackled within refugee studies, where the focus has been on the relationship between integration and education of refugees. UNHCR has made a small contribution to the topic of educating about refugees with a web page entitled 'Teaching About Refugees'.⁴⁵ This provides resources and toolkits for primary and secondary school teachers but is in part out-dated and only available in English. By switching the perspective from the refugees to the host communities, this paper aims to offer a fresh approach to the complex topic of integration while remaining aligned with the goal of refugee studies: to improve the lives of refugees.

2.2 Empathy

One of the skills required to engage effectively in intercultural dialogue is empathy, which, according to the document 'Competences for Democratic Culture' produced by the Council of Europe, can help 'facilitate comprehension of the other person's point of view'.⁴⁶ The same idea emerges from the special issue of *Intercultural Education* dedicated to teaching about refugees.⁴⁷

2.2.1 What is empathy?

In its broad definition, empathy is accepted as a phylogenetically ancient capacity that enables one to relate quickly and automatically to the emotional states of others.⁴⁸ According to De Waal, it can subsume different levels: from emotional contagion, through sympathetic concern or cognitive empathy – namely the ability to understand the other's situation – to the highest level, that is, perspective-taking.⁴⁹ Zaki and Ochsner reiterate this concept by defining

36 For a comprehensive review of documents focused on intercultural education in Europe, see I Sikorskaya, 'Intercultural Education Policies Across Europe as Responses to Cultural Diversity (2006–2016)' (2017) Working Papers del Centro Studi Europei <<http://www.papersecse.unisa.it/autori/sikorskaya>> accessed 4 October 2019 and Faas, Hadjisoteriou and Angelides (n 32) 302.

37 See UNESCO, 'Guidelines on Intercultural Education' (2006) <<http://unesdoc.unesco.org/images/0014/001478/147878e.pdf>> accessed 4 October 2019 and UNESCO, 'Investing in Cultural Diversity and Intercultural Dialogue' (2009) <<http://unesdoc.unesco.org/images/0018/001852/185202e.pdf>> accessed 4 October 2019.

38 Faas, Hadjisoteriou and Angelides (n 32) 312.

39 Council of Europe, 'Intercultural Cities Program' <<https://www.coe.int/en/web/interculturalcities/home>> accessed 4 October 2019.

40 Sikorskaya (n 36) 17.

41 European Parliament, 'Intercultural Education in Schools' (2008) <[http://www.europarl.europa.eu/RegData/etudes/etudes/join/2008/405392/IPOL-CULT_ET\(2008\)405392_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/etudes/join/2008/405392/IPOL-CULT_ET(2008)405392_EN.pdf)> accessed 4 October 2019.

42 UNESCO, 'Global Education Monitoring Report' (n 17) 481–4.

43 M Nenadovic (ed), 'Teaching About Refugees' (2017) 28(5) Intercultural Education.

44 M Nenadovic, 'Introductory Remarks to the Special Issue on Teaching About Refugees' (2017) 28(5) Intercultural Education 427.

45 UNHCR, 'Teaching About Refugees' <<http://www.unhcr.org/en-us/teaching-about-refugees.html>> accessed 4 October 2019.

46 Council of Europe, 'Competences for Democratic Culture – Living Together as Equals in Culturally Diverse Democratic Societies' (2016) <<https://rm.coe.int/16806ccc07>> accessed 4 October 2019.

47 Nenadovic, 'Teaching about refugees' (n 43).

48 F B M De Waal, 'Putting the Altruism Back into Altruism: The Evolution of Empathy'

(2008) 59 Annual Review of Psychology 279.

49 *ibid.*

empathy as a 'multifaceted construct that has both affective and cognitive components'.⁵⁰

As the capacity at the basis of any form of social interaction, empathy is an essential aspect of disciplines as varied as political theory, neuroscience, applied linguistics, social psychology and philosophy. Although it has emerged as a relevant concept in the fields of peace and conflict resolution, it has received little attention in international relations⁵¹ and even less in refugee studies. Despite the scarcity of papers in this area, one example worth citing is a study by Hartman and Morse involving Ivorian refugees, demonstrating how the first-hand experience of violence can actually augment people's ability to empathise with others.⁵²

2.2.2 Empathy and altruism

This study is based on the psychological theory that empathy can drive altruism. According to De Waal, once empathy has reached the level of sympathetic concern which involves other-orientation, it becomes the autonomous motivation of directed altruism, i.e. 'altruistic behaviour aimed at others in need, pain or distress'.⁵³

This theory is echoed by Batson's empathy-induced altruism hypothesis, which similarly identifies empathic concern as the source of altruistic attitudes.⁵⁴ Because of this connection between empathy and altruism, the stimulation of empathic reactions could have very positive repercussions on improving attitudes towards stigmatised groups such as refugees. In fact, according to this theory, being able to take the perspective of a stigmatised person can enhance empathy. This, in turn, can lead to the stigmatised person's welfare being regarded as valuable by the empathiser. This increased value could then be extended from the group member to the entire group if group membership is related to the stigmatisation – for instance if the person was a victim of ethnic slurs.⁵⁵

Interestingly, various studies show that in the case of a stigmatised individual empathy is experienced as a response to elements such as responsibility and controllability.⁵⁶ A research study demonstrated that participants felt more empathy for people with mental illness when they thought the person's condition was not their own fault. Participants also appeared more willing to help in this circumstance. By contrast, those who believed the people were responsible for their own diseases felt anger and fear, which translated into the desire to keep such individuals away from the community.⁵⁷

2.2.3 The 'failures' of empathy

Studying the circumstances and the causes of empathy 'failures' can be very revealing because empathy can indeed backfire and not necessarily lead to pro-social behaviour.⁵⁸ For instance, Zaki makes the important observation that empathy is not always automatic, but easily influenced by the context.⁵⁹ In particular, he identifies intergroup conflict and expertise as factors interfering with the empathic process. In the first case, research shows that in a situation of group rivalry, empathy can dissipate as soon as the target is perceived as no longer belonging to the group. In the case of expertise, Zaki draws attention to certain professions in constant close contact with human suffering for whom feeling empathy at all times could seriously interfere with their ability to carry out their tasks. He cites surgeons who, in order to operate on patients, need to control their empathic reactions. He also mentions a body of research showing that over time doctors and nurses tend to underestimate the pain experienced by their patients, thus showing a decrease in empathy.⁶⁰

Moreover, according to Broome, empathy is a 'failure' in the sense that it cannot help us further our understanding of another's situation as we are incapable of separating ourselves from our cultural baggage and experiences.⁶¹ Similarly, DeTurk argues that in intercultural communication the dominant group universalises their experiences, thus leaving no space to develop any empathy for minorities.⁶² Finally, in her discussion of empathy within the Israeli–Palestinian relationship, Head highlights that although empathy might be fostered during the dialogue phase, it does not

50 J Zaki and K Ochsner, 'The Neuroscience of Empathy: Progress, Pitfalls and Promise' (2012) 15(5) *Nature Neuroscience* 675.

51 See N Head, 'A Politics of Empathy: Encounters with Empathy in Israel and Palestine' (2016) 42 *Review of International Studies* 95.

52 A C Hartman and B S Morse, 'Violence, Empathy and Altruism: Evidence from the Ivorian Refugee Crisis in Liberia' (2017) <http://cega.berkeley.edu/assets/miscellaneous_files/119_-_HartmanMorseViolenceEmpathy-May_2015_-_ABC.pdf> accessed 4 October 2019.

53 De Waal (n 48) 281.

54 C D Batson, 'Empathy-induced Altruistic Motivation' Draft of Lecture/Chapter for Inaugural Herzliya Symposium on 'Prosocial Motives, Emotions, and Behavior' (2008) 8.

55 C D Batson, J Chang, R Orr and J Rowland (n 7).

56 See N Eisenberg, N D Eggum and L Di Giunta, 'Empathy-related Responding: Associations with Prosocial Behavior, Aggression, and Intergroup Relations' (2010) 4(1) *Social Issues and Policy Review* <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3017348/#R43>> accessed 4 October 2019.

57 See the study 'An Attribution Model of Public Discrimination Towards Persons with Mental Illness' by P M Corrigan, F E Markowitz, A Watson, D Rowan, M A Kubak cited by Eisenberg, Eggum and Di Giunta (n 56).

58 M Cikara, E G Bruneau and R R Saxe, 'Us and Them: Intergroup Failures of Empathy' (2011) 20(3) *Current Directions in Psychological Science* 149.

59 J Zaki, 'Empathy: A Motivated Account' (2014) 140(6) *Psychological Bulletin* 1611.

60 ibid.

61 B. J. Broome 'Building shared meaning: Implications of a relational approach to empathy for teaching intercultural communication' (1991) 40(3) *Communication Education* 235–249.

62 S DeTurk, 'Intercultural empathy: Myth, competency, or possibility for alliance building?' (2001) 50(4) *Communication Education* 374–384.

necessarily lead to action afterwards. Other factors such as material interests, social identity and previous ideas and ideals are likely to prevent empathy from translating into change.⁶³

2.3 Virtual reality

The connection between empathy and virtual reality was popularised in 2015 by the filmmaker Chris Milk. In a TED Talk viewed more than 1.5 million times, he defined VR as the 'ultimate empathy machine'.⁶⁴ The possibilities unleashed by the introduction of affordable VR viewers combined with the accessibility of 360-degree filming technology fuelled the mediatic enthusiasm for the claim that VR could cure the empathy deficit of our era. One of these viewers was the Google Cardboard, released in 2014. Soon after, in 2015, large platforms such as YouTube and Facebook started supporting 360-degree videos. This led to a proliferation of 3-D videos that, combined with the affordability of the Cardboard viewers, made experiencing virtual reality very accessible.

Even large media groups such as CNN, the BBC, The Economist Group and The New York Times Company started experimenting with 360-degree video content and adding VR as another layer of content.⁶⁵ The momentum was such that on 8 November 2015, the *New York Times* gifted all its Sunday print subscribers a Google Cardboard VR viewer, thus giving 1.3 million readers instant access to VR.⁶⁶ Although on a smaller scale, *The Guardian* undertook a similar initiative on October 7, 2017, when it gave away 97,000 Google Cardboard viewers to its UK readers.⁶⁷

This eagerness to adopt VR quickly spread to many large NGOs. In the UK, Amnesty International director, Kate Allen, stated: 'If a picture is worth a thousand words, then a virtual reality experience is worth a whole book'.⁶⁸ One of Amnesty's successful VR projects involved transporting passers-by to the streets of Aleppo to denounce barrel bombing. The response was very positive and resulted in a 16 per cent increase in direct debit donations.⁶⁹ UNICEF made similar claims. According to the organisation, the showing of the 360-degree VR video, *Clouds Over Sidra*, helped them achieve a 40 per cent rise in donations. Recently, the IRC also chose VR to show life in a refugee camp in Lebanon on the premise that: 'We can't bring donors or people to the field, but we bring the field to [them]. That's what's so great about VR; that's what makes it... such an important tool for charities'.⁷⁰

Within the academic world, one of the most active institutes in this area is the Stanford Virtual Human Interaction Lab, which has focused many of its efforts on studying the relation between VR and empathy. One of its latest projects, entitled 'Empathy at Scale' and led by Zaki, 'seeks to design, test, and distribute virtual reality interventions that teach empathy'.⁷¹

2.3.1 The many sides of the empathy debate

This wave of popularity around VR and its attributed capacity to be 'the ultimate empathy machine' provoked an intense media debate involving artists and journalists as well as social scientists and psychologists. For instance, traditionally trained journalists, such as Nonny de la Pena, started seeing in this medium the possibility of realising immersive journalism and therefore engaging the audience actively by offering them first-person experiences of news stories.⁷² At the same time, some were concerned the focus on empathy was putting VR at risk of 'becoming the medium for showing the horrors of war, and showing struggle – a very dark medium'.⁷³

For their part, social scientists and psychologists have been stressing VR does not automatically or scientifically foster empathy. Bailenson, the founding director of the Stanford Virtual Human Interaction Lab, who has been researching this topic for 15 years, believes that VR can indeed lead to empathy, but, in a similar way to other media, in order to do so it needs to bring quality content to the audience or, in Bailenson's words, content which has been 'crafted carefully'.⁷⁴ Janet Murray, a professor of digital media, shares the same view about empathy not being engendered

63 Head (n 51).

64 Milk (n 9).

65 See for instance <[>](https://edition.cnn.com/vr), <[>](http://www.bbc.co.uk/connectedstudio/projects/virtual-reality), <[>](https://www.economist.com/topics/virtual-and-augmented-reality), <[>](http://www.nytimes.com/marketing/nytvr).

66 M Wohlsen, 'Google Cardboard's New York Times Experiment Just Hooked a Generation on VR' WIRED (9 November 2015) <[>](https://www.wired.com/2015/11/google-cardboards-new-york-times-experiment-just-hooked-a-generation-on-vr) accessed 4 October 2019.

67 'Guardian to Give Away Nearly 100,000 Google Cardboard Headsets to Readers and Launches New Guardian VR App for Cardboard' *The Guardian* (London, 6 October 2017) <[>](https://www.theguardian.com/gnm-press-office/2017/oct/06/guardian-to-give-away-nearly-100000-google-cardboard-headsets-to-readers-and-launches-new-guardian-vr-app-for-cardboard) accessed 4 October 2019.

68 Amnesty International, '#360Syria "Virtual Tour" Website Reveals Devastation of Aleppo Barrel Bombing' 11 March 2016 <[>](https://www.amnesty.org.uk/press-releases/360syria-virtual-tour-website-reveals-devastation-aleppo-barrel-bombing) accessed 4 October 2019.

69 Amnesty International, 'First Use of Virtual Reality Fundraising a Hit with Members of the Public' 22 May 2015

<[>](https://www.amnesty.org.uk/press-releases/first-use-virtual-reality-fundraising-hit-members-public) accessed 4 October 2019.

70 P Bloom, 'It's Ridiculous to Use Virtual Reality to Empathize with Refugees' *The Atlantic* (3 February 2018).

71 Virtual Human Interaction Lab, 'Empathy at Scale' Stanford University <[>](https://vhil.stanford.edu/projects/2015/empathy-at-scale) accessed 4 October 2019.

72 N de la Pena et al., 'Immersive Journalism: Immersive Virtual Reality for the First-Person Experience of News' (2010) 19(4) *Presence* 291.

73 R Manthorpe, 'Seven Lessons for VR Journalists, from the People Who Should Know' WIRED (10 May 2017) <[>](https://www.wired.co.uk/article/making-virtual-reality-journalism-reuters-report) accessed 4 October 2019.

74 J Bailenson, 'How to Create Empathy in VR' WIRED (26 February 2018) <[>](http://www.wired.co.uk/article/empathy-virtual-reality-jeremy-bailenson-stanford) accessed 4 October 2019.

automatically, instead stating that it ‘must be produced as in any other storytelling medium by mature narrative techniques employed by skilled practitioners’.⁷⁵

Another controversial argument was recently put forward by the psychologist Paul Bloom, who argued the real ‘empathy machines’ are books. In his opinion, even if VR allows viewers to visit a refugee camp, it does not let them experience the fear refugees have to face. Duration, safety and control are aspects of VR preventing an individual from really understanding what it is like to be living the life of a refugee. While he does not deny VR might have some educational value in showing otherwise inaccessible environments, his argument goes further in asserting that empathy might not be desirable as a moral compass. According to him, empathy might be more easily directed to individuals similar to ourselves. Similarity, however, should not be a deciding factor in our choice of whom to help. In this sense, therefore, empathy might be misleading and ultimately cloud our judgement on how our resources should be best spent.⁷⁶

75 J H Murray, ‘Not a Film and Not an Empathy Machine’ (6 October 2016) <<https://immerse.news/not-a-film-and-not-an-empathy-machine-48b63b0eda93?gi=851ca58935e0>> accessed 4 October 2019.

76 Bloom (n 70).

3. Methodology

3.1 Area of study and research questions

The area of this research includes the fields of education about refugees, empathy and VR. The main research question it aims to answer is the following: is VR effective in fostering empathy within the context of education about refugees?

The sub-questions this study will address are:

- for what reasons is it (in)effective?
- will the experience of VR give rise to a kind of empathy that leads to action?

3.2 Research design

In order to answer the research questions, a study was designed which took place in the spring of 2018. It involved 107 middle school and high school students attending Green School⁷⁷ and Pelangi School,⁷⁸ both located on the island of Bali, Indonesia. The study consisted of showing the participants two videos – the 360-degree video *Clouds Over Sidra* and the short film *Step into a Refugee Camp* – and asking them to answer a questionnaire before and after undergoing these experiences.

Clouds Over Sidra was shot in only two days in December 2014 by Chris Milk and Gabo Arora with the support of the UNVR. It takes place in the Za'atari camp in Jordan and presents the life of Sidra, a 12-year-old from Syria, who leads the audience through the camp.

Step into a Refugee Camp is an online multimodal news story about Syrian refugees also living in the Za'atari camp in Jordan. It was produced by the *New York Times* and broadcast live on Facebook on 30 December 2016. It was chosen because it was filmed in the same camp as *Clouds Over Sidra*. In addition, it is a short film, but with an innovative component: real-time interventions of viewers around the world were shown on half of the screen during the live streaming. These were further integrated into the content of the video, sometimes as questions to the refugees themselves and sometimes as comments. Allowing the audience to 'tag along'⁷⁹ offered a certain level of interaction not common to short films, but one which resembles the sense of presence enabled by VR. This format seems therefore more suited for a comparison to a novel medium such as VR.

In order to maximise the statistical significance of the study, the within-subjects design was adopted. This means that each participant was exposed to both *Clouds Over Sidra* and *Step into a Refugee Camp*.

The use of the maximum number of subjects available increased the statistical power of the study and decreased the possibility of beta error, that is the probability of not discovering an effect although it really does exist.⁸⁰ By contrast, the adoption of a between-subjects design would have halved the sample as 50 per cent of the participants would have had the experience of *Clouds Over Sidra* and the rest that of *Step into a Refugee Camp*.

The other advantage of the within-subjects design is a reduction in error variance.⁸¹ This refers to individual difference variables that might affect the results in between-subjects studies – even when subjects are randomly assigned to the two groups. For instance, factors such as intelligence, maturity, political background, etc. might impact the participants' experience. However, this variance is minimised with the within-subjects design: the conditions vis-à-vis individual difference variables do not change because the same participants undergo the same experiences.

Next to these advantages, it is also important to point out the main weakness of this design, namely the 'carryover effect'. This indicates the evaluation of one experience might have been influenced by participants also having been exposed to the other. This could be positive in the sense that one experience might have helped to trigger empathy and the other might have built upon this first reaction (practice effect). However, it could also be negative. For instance, one experience might have been off-putting, thus hindering the development of empathic feelings (fatigue effect).⁸² Overall, this effect is never desirable because the goal of the study is to assess the effectiveness of VR on its own, not combined with other media.

In order to lessen the 'carryover effect', for each of the questions comparing *Clouds Over Sidra* and *Step into a Refugee Camp*, the two videos appear in the first choice position in an alternate manner. Hence, the question 'Which of the two videos did you like the most?' presents *Step into a Refugee Camp* first. This is followed by the question 'Which experience did you like the most?' where virtual reality and *Clouds Over Sidra* feature as the first choice.

Moreover, the questions asking participants about their emotional reaction do not list the feelings to grade in the same order. In the case of *Step into a Refugee Camp*, the succession is 'feeling sorry', '(un)hopeful', 'angry/frustrated', 'sympathetic', 'sad', 'concerned' and 'anxious/uncomfortable', while with regards to *Clouds Over Sidra* it is 'feeling

77 Green School <<https://www.greenschool.org/>> accessed 4 October 2019.

78 Pelangi School <<http://www.pelangischoolbali.com/>> accessed 4 October 2019.

79 Acosta (n 3).

80 'Within-Subjects Designs' Psychology World <https://web.mst.edu/~psyworld/within_subjects.htm> accessed 4 October 2019. See also R A McQueen, C Knussen, 'Planning a Study – The Design' in Research Methods for Social Science: A Practical Introduction (Prentice Hall 2002) 24.

81 *ibid.*

82 *ibid.*

sorry', 'anxious/uncomfortable', 'sad', 'concerned', 'angry/frustrated', '(un)hopeful' and 'sympathetic'. This strategy was implemented in order to encourage the respondents to reflect upon the answer and not reply automatically by anticipating the question.

Despite these attempts, it is important to point out this weakness especially affects the section on responsibility and the questions aimed at assessing the change in attitude before and after viewing the material. The absence of a control group in order to test the two experiences separately does not allow us to determine which one had more of an impact than the other in triggering different forms of responsibility or different changes in attitude.

3.3 Methods

3.3.1 Desk-based research

Desk-based research was carried out to examine the main theories of empathy and the debate around the recent developments and uses of VR, and discover material dealing with education about refugees. It also was necessary to identify the main principles on which to build the questionnaires and analyse the data collected.

The 'snowball' method was used to search for journal articles. This means the bibliographies of journals were examined thoroughly to find other relevant sources. Moreover, search terms such as 'education about refugees', 'empathy', 'empathy and refugees', 'empathy and education', 'empathy and altruism', 'virtual reality', 'empathy and virtual reality', etc. were entered both in the publications *Journal of Refugee Studies* and *Refugee Survey Quarterly* and, more generally, in the University of London online library catalogue. Finally, as the debate surrounding virtual reality vis-à-vis empathy predominantly took place in the media world, this was mainly researched through magazines and newspaper articles.

3.3.2 Questionnaires

The data gathering method used was the self-report questionnaire. According to a 2010 review on how to research virtual worlds in elementary and higher education, questionnaires appeared to be the most frequently used method of collecting data.⁸³

3.3.2.1 Design

Two separate questionnaires were designed. The first one was distributed at the very beginning prior to the participants viewing any of the videos. It contained generic questions about the demographics of the participants (age, sex and nationality), their experience with and attitude towards VR and refugees. These were aimed at providing some analytical categories to analyse the data collected.

The participants accessed the second questionnaire only after experiencing both *Clouds Over Sidra* and *Step into a Refugee Camp*. This featured questions on their reactions to both videos. In addition, it included some questions about responsibility and some of the same questions already asked in the first questionnaire.

In order to maintain anonymity, the authorship of the two questionnaires was achieved by assigning participants a reference number they had to enter on both questionnaires. This system also allowed pairing and comparing of the questionnaires.

3.3.2.2 Objectives

The questionnaires were designed to fulfil two objectives. The first one was to collect data to answer the core question of whether VR is effective compared to other media in fostering empathy. To this end, some of the questions addressed both the emotional and cognitive empathic reactions of the respondents. Additionally, some specific questions about the medium of VR were included in order to understand whether its immersive qualities added value vis-à-vis eliciting empathy.

Second, the questionnaires aimed to provide a before/after assessment to highlight any difference in attitude that might have taken place after the participants experienced both the VR video and the multimodal news story. Consequently, they share some of the same questions. These were: 'What do you think are the three things (not people) you would take with you if you had to flee in a hurry?', 'How would you define a refugee?' and 'Do you think it is our responsibility to help refugees?'

3.3.2.3 Limitations

These questionnaires are based on self-reporting, which is not a precise measurement tool. There are, however, some strategies that can be implemented to improve accuracy. One of these is anonymity.⁸⁴ Another is to ask the respondents to answer truthfully.⁸⁵ In the design and administration of these questionnaires both these techniques were implemented.

However, these strategies are not enough to prevent a number of variables from influencing the final results. Although

⁸³ K Foon Hew and W S Cheung, 'Use of Three-dimensional (3-D) Immersive Virtual Worlds in K-12 and Higher Education Settings: A Review of the Research' (2010) 41(1) British Journal of Educational Technology 33.

⁸⁴ K A Korb, 'Self-report Questionnaires: Can they Collect Accurate Information?' (2011) 1 Journal of Educational Foundations 5 <http://korbedpsych.com/LinkedFiles/Self_Report_Questionnaires.pdf> accessed 4 October 2019.

⁸⁵ ibid.

the questions were carefully formulated so as to avoid biasing statements, participants might nevertheless have responded according to what they deemed a socially desirable answer. In other words, they might have had a notion of what was the 'correct answer' that made them look good.⁸⁶ This aspect also needs consideration in the light of the liberal orientation of the schools where the study took place.

Finally, dispositional variables might also play a role.⁸⁷ Since this study involved the empathic response to a given situation ('situation empathy'), an individual predisposition to experience empathy ('dispositional empathy') might also have had an effect on the research findings.⁸⁸

3.4 Participants

The 107 participants (51 girls and 56 boys with a mean age of 13.8) who took part in the study were not selected for any reasons other than availability. The four largest nationality groups represented were the USA with 20 per cent, Australia with 17 per cent, Indonesia with 15 per cent and finally the UK with 13 per cent. Moreover, it is also relevant to point out that 31 per cent of the students had two or more nationalities and 65 per cent had one nationality.

3.5 Data analysis

3.5.1 Quantitative method

The quantitative method was used in the first questionnaire predominantly to collect demographic data. Additionally, the question 'Do you think we have a responsibility to help refugees?' based on a 5-point scale featured in both questionnaires. This enabled a quantitative comparison between the answers given before and after participants underwent the two experiences of *Clouds Over Sidra* and *Step into a Refugee Camp*.

Five-point scale questions were also employed to measure the participants' reactions to the two media and compare them quantitatively. These were integrated with the open-ended question: 'Any other feeling or comment about *Clouds Over Sidra/Step into a Refugee Camp?*' to give participants a further opportunity to explain their grading. Another instance of this mixed method is the question: 'Why? Please explain why you think it is or is not our responsibility to help refugees', which follows the quantitative question mentioned above about responsibility.

3.5.2 Qualitative method

According to Richards and Morse, among the purposes of qualitative methods is 'to learn from the participants in a setting or a process the way they experience it'.⁸⁹ To this end, four open-ended questions have been added to the first questionnaire and 12 to the second.

Data analysis was carried out using the program Excel and following the process recommended by Ellen Taylor-Powell and Marcus Renner.⁹⁰ After acquiring familiarity with the answers by reading them multiple times, these were categorised. First, recurrent themes were identified by adding an empty column next to the answer column and filling it in, cell by cell, with some keywords summarising the main concepts expressed in the reply. Second, the emerging themes were grouped into categories. This process was repeated a few times until no new themes or subcategories emerged and was then applied to all the answers to the open-ended questions. At the end of this procedure, different categories were obtained for each question. Once they were finalised, they were quantified in percentages in order to establish their relative importance. Last, similar categories emerging from different answers were connected and interpreted together in the discussion of the findings.

⁸⁶ K Foon Hew and W S Cheung (n 83).

⁸⁷ See N Eisenberg and A S Morris, 'The Origins and Social Significance of Empathy-related Responding. A Review of Empathy and Moral Development: Implications for Caring and Justice by M. L. Hoffman' (2001) 14(1) Social Justice Research 95.

⁸⁸ Stanford Encyclopedia of Philosophy, 'Measuring Empathy' <<https://plato.stanford.edu/entries/empathy/measuring.html>> accessed 4 October 2019.

⁸⁹ L Richards and J M Morse, *Read Me First for a User's Guide to Qualitative Methodology* (2nd edition, Sage 2007) 28.

⁹⁰ E T Powell and M Renner, 'Analyzing Qualitative Data' (2003) <<https://deltastate.edu/docs/irp/Analyzing%20Qualitative%20Data.pdf>> accessed 4 October 2019.

4. Findings

4.1 Part 1: Comparing the experiences of 'Clouds Over Sidra' and 'Step into a Refugee Camp'

The set of questions analysing and comparing the experiences of *Clouds Over Sidra* and *Step into a Refugee Camp* was structured around Davis's multidimensionality of empathy.⁹¹ According to this concept, cognitive and affective empathy are interdependent and influence each other. Hence, some of the questions were aimed at assessing the cognitive, perspective-taking capabilities of the participants. An example of this was: 'Which one of the videos helped you more to "put yourself in the shoes of a refugee"?' Others were focused on the emotional reactivity of the participants. Instances of these were the quantitative questions asking students to grade their feelings.

4.1.1 'Clouds Over Sidra' versus 'Step into a Refugee Camp'

When asked which video they liked the most, 63 per cent of participants gave their preference to *Clouds Over Sidra*. At the same time, 88 per cent indicated this as the experience that helped them more put themselves into the shoes of a refugee.

For both questions, the prevailing reasons for choosing *Clouds Over Sidra* were the feeling of 'being there' (respectively 24 per cent and 20 per cent) and being realistic (24 per cent and 12 per cent). Furthermore, 23 per cent of respondents preferred it simply because VR is 'cool' and the 360-degree view felt novel, while another 21 per cent liked it more because it offered the perspective of a child. A further theme that emerged from these answers was the depiction of daily life chosen by 12 per cent of those who preferred *Clouds Over Sidra* and also, interestingly, by 11 per cent of those who selected *Step into a Refugee Camp*.

It is noteworthy that respondents chose *Step into a Refugee Camp* mainly because it was more informative (37 per cent). By contrast, this accounted for only 6 per cent of the answers of those who selected *Clouds Over Sidra*. Additional reasons for preferring *Step into a Refugee Camp* were the depiction of multiple perspectives (34 per cent) and the fact it showed comments from viewers all over the world (34 per cent). Last, 11 per cent chose it because they did not like the VR experience due to the low quality of the Cardboard viewers.

4.1.2 Short-film versus VR – 'Which experience did you like the most?'

88 per cent of respondents expressed their preference for VR as a medium. In addition to the theme of 'being there' (38 per cent), another noteworthy category included 'being able to look all around' (20 per cent), while 13 per cent preferred VR because it offered them a 360-degree, tri-dimensional experience.

An interesting piece of data is that 61 per cent of those who indicated *Step into a Refugee Camp* as their preferred video chose VR as their favourite medium (11 out of 17 of these had never experienced VR before). However, the reverse is not true as only 8 per cent of participants who chose *Clouds Over Sidra* selected the short film as their preferred experience (40 per cent did so because they felt physical discomfort when they used the Cardboard viewer).

4.1.3 'Was it useful to be able to move around in Sidra's world?'

97 per cent of respondents confirmed the usefulness of being able to move around in Sidra's world. This high percentage means the freedom granted by VR to choose where to go and what to focus on at any given time was considered important by both those students who had never tried VR before and those who had. Bailenson recently discussed various studies demonstrating the more people can move, the more empathetic their experience will be. In his words: 'If you want to move people, you should move them'.⁹²

In this research, an attempt was made to understand the link between physical movement and empathy by examining the answers to the open-ended question asking why moving around was useful. Data analysis revealed that 31 per cent of answers contained some level of empathy. Themes classified as signs of an empathetic reaction included feeling connected, feeling like a refugee, being able to see themselves in the refugees' shoes, feeling sadness, sympathy, developing a deeper understanding by being there and wanting to help. Here are some opinions of how being able to move around could improve perspective-taking capacities and stimulate empathy: '[i]t made you feel like you were a refugee yourself'⁹³ and '[i]t was moving and inspiring, it now feels like I should do something about it'.⁹⁴

4.1.4 Emotional reactivity

In order to understand the emotional reactivity of the participants, a series of questions was formulated asking students to grade their feelings from 1 (lowest) to 5 (highest). These included feeling sorry, angry, uncomfortable/anxious, hopeful, sympathetic, sad and concerned. They were chosen on the basis of Davis's scales measuring empathic

⁹¹ M H Davis, 'A Multidimensional Approach to Individual Differences in Empathy' (1980) 10 JSAS Catalog of Selected Documents in Psychology 85.

⁹² Bailenson (n 74).

⁹³ 804, Student of Green School, Bali, Indonesia, 23 April 2018.

⁹⁴ 823, Student of Green School, Bali, Indonesia, 23 April 2018.

concern (feeling sympathy for others) and personal distress (feeling uncomfortable vis-à-vis the suffering of others).⁹⁵

These questions were also an attempt to capture both parallel and reactive empathy. Parallel empathy refers to emotions matching those of the videos' protagonists and was assessed through the questions about sadness, hopefulness and anger/frustration. This kind of empathy is important because it can provoke feelings of injustice, which might be used to dismantle prejudice.

Reactive empathy, on the contrary, includes feelings of being sorry, concerned and sympathetic. On the one hand, research shows these types of feelings can lead to cognitive dissonance. This occurs when we are feeling sorry, but at the same time we do not want to feel that way – similar to when we close our eyes or look away while watching a movie that is having a strong emotional impact on us. On the other hand, they can also inspire a desire to counteract prejudice.⁹⁶

Reactive empathy also comprises feelings of personal distress when confronted with another's suffering. Participants were asked to indicate if they felt uncomfortable or anxious after going through the two experiences because the predominance of these feelings could impact negatively the desire to improve intergroup relations.

The scale questions were followed by an open-ended question asking participants if they experienced any other feelings during the viewings. This section also included the question: 'Which video gave you a stronger emotional reaction?' in order to allow participants to compare *Clouds Over Sidra* and *Step into a Refugee Camp* directly.

4.1.4.1 Results

For each scale question, the number choice was multiplied by the number of students who selected it and then summed up. This gave us an overall value comprehensive of all choices. The results are summarised in the table below for an easy comparison.

	Sorry	Hopeful	Angry	Sympathetic	Sad	Concerned	Uncomfortable/ Anxious
<i>Clouds Over Sidra</i>	449	380	388	443	416	426	368
<i>Step into a Refugee Camp</i>	435	354	366	440	387	422	428

In answer to the question about which video gave them the stronger emotional reaction, 65 per cent expressed their preference for *Clouds Over Sidra*. The reasons for choosing *Clouds Over Sidra* reflected previous results: being there (16 per cent), portraying a child's perspective (16 per cent) and coming across as more real (15 per cent). The same can be said for *Step into a Refugee Camp* as two of the predominant themes had also appeared before, namely the depiction of multiple perspectives (25 per cent) and the negative comments coming from around the world (19 per cent). Moreover, this was the first time the theme of family hardship surfaced (11 per cent).

4.1.5 Discussion

The quantitative questions gave us a first indication that *Clouds Over Sidra* was more effective than *Step into a Refugee Camp* in fostering empathy: 88 per cent indicated it as the experience that helped them better put themselves into a refugee's shoes and 65 per cent as the video that gave them a stronger emotional reaction.

From the analysis of the qualitative questions, three main themes were identified in connection with the concept of empathy: fostering better understanding, the importance of relatability and 'being there'. Additionally, the answers to the emotional reactivity questions also highlighted the difference between the two experiences, especially regarding the arousal of parallel empathy.

4.1.5.1 Fostering better understanding

When we look at the list of reasons why participants chose one experience versus the other, it seems clear that those who selected *Step into a Refugee Camp* valued its informative aspect. In other words, they especially focused on the amount of information they could extrapolate from the content. This emerged from the appreciation of being exposed to multiple perspectives and life stories. Additionally, this video offered the unique advantage of providing information not only about the refugees living in the Zá'tari camp, but also about the attitude towards refugees of people around the world. In the words of one of the participants: 'This video really gave me a deeper perspective and I feel as though it gave me more information as well as gave my [sic] insight on the opinions of civilians all around the world'.⁹⁷

By contrast, the participants who stated their preference for *Clouds Over Sidra* based their choice mainly on what they felt during the experience. This video too delivered new information, but the level of better understanding it helped

⁹⁵ Davis (n 91).

⁹⁶ Eisenberg, Eggum and Di Giunta (n 56).

⁹⁷ TV 117, Student of Green School, Bali, Indonesia, 21 May 2018.

achieve was attributed to feelings of ‘being there’ and the sense of realism experienced through VR: ‘I liked the VR experience more, because, I think that “being” there helped my realize the life of the refugees...’⁹⁸ This experiential learning enabled by VR is further confirmed by the fact that 88 per cent of respondents indicated *Clouds Over Sidra* as the experience that helped them better take the perspective of a refugee.

It is indisputable that both videos brought about a new level of understanding of refugee life. However, while in *Step into a Refugee Camp* this was stimulated through the delivery of context and facts, in *Clouds Over Sidra* it was achieved through a process of being immersed in a different world. Hence, sharing the same reality as refugees, even if virtually, seemed more likely to trigger and develop the affective (feeling the same as a refugee) and cognitive (understanding the reality of refugee life) elements characterising the multidimensionality of empathy. This observation is validated by the study of Gehlbach et al., which found ‘virtual environments...particularly effective settings to train individuals in how to improve their [social perspective taking] capacities’⁹⁹

4.1.5.2 The importance of relatability

Another key reason for *Clouds Over Sidra*’s success at eliciting empathy was that it offered a higher level of relatability. This was achieved through the depiction of a child’s daily life, but also through the focus on a single story, which allowed for more intimacy and a deeper level of acquaintance. Since all participants were between 12 and 18 years old, they could easily identify with Sidra who at the time of filming was 12. This commonality created a much stronger connection and favoured the development of empathy. One of the students wrote: ‘[T]he fact that it was narrated from the point of [view] of a young girl made me especially empathize with it more because I am a young girl’.¹⁰⁰

Interestingly, *Step into a Refugee Camp* also contained a comparable element. Among the people interviewed was a family – a mother with four children, including a 15-year-old daughter who aspired to become a doctor. Similarly to *Clouds Over Sidra*, we were invited into their tent where they shared their dreams and sufferings. This intimate moment was highlighted by respondents as one of the reasons why they had a stronger emotional reaction to this video versus the VR experience. They could easily recognise the pain of a mother unable to provide for her children and that of children who had been separated from their father for over a year. In the words of two students, *Step into a Refugee Camp* was more emotional because ‘[it] was about a mother’s concern for her family’¹⁰¹ and because ‘the 15th [sic] year [old] girl on the house is a little bit relateable [sic] because [sic] we are in the same age group... and I feel more sympathy because I hope she can have her dream come true’.¹⁰²

Another feature of both *Clouds Over Sidra* and *Step into a Refugee Camp* that stressed the importance of being able to relate as a way to foster empathy was the idea that we all share a common humanity.¹⁰³ This strategy was employed in both videos to mitigate differences among the ‘us’ versus ‘them’ dichotomy that could severely hinder the process leading to empathy. It was mainly achieved by focusing on daily activities such as working in a shop or sharing food with one’s family. This was clearly reflected by the participants’ many comments on daily aspects of refugee life, which they found easily recognisable and relatable – e.g. the ‘yumminess of bread’,¹⁰⁴ seeing what they were having for dinner or what their school was like.¹⁰⁵

However, although this element was present in both videos, VR had the advantage that it offered the freedom to explore the environment where refugees lived their daily lives. Additionally, it gave viewers control over where to turn or what to investigate. This made respondents feel as if they were participating in life at the camp, not just learning about it, and in turn facilitated the process of perspective-taking. Imagining yourself as part of another person’s surroundings is more challenging when you are familiar with only a small portion of it (and one that has been decided for you by the cameraperson). According to one student: ‘it’s almost as if your [sic] there, and you get to see how life really goes on rather than just in front of a camera’.¹⁰⁶

4.1.5.3 ‘Being there’

It is rather tempting to read the strong preference given to VR as a medium – 88 per cent of students selected it – and its capacity to take viewers inside the scene as evidence of its effectiveness in fostering empathy. Not by chance has it

98 TV 109, Student of Green School, Bali, Indonesia, 21 May 2018.

99 H Gehlbach, G Marietta, A M King, C Karutz, J N Bailenson, C Dede, ‘Many Ways to Walk a Mile in Another’s Moccasins: Type of Social Perspective Taking and its Effect on Negotiation Outcomes’ (2015) 52 Computers in Human Behavior 529.

100 TV 118, Student of Green School, Bali, Indonesia, 21 May 2018.

101 VR 916, Student of Green School, Bali, Indonesia, 21 May 2018.

102 TV 103, Student of Green School, Bali, Indonesia, 21 May 2018.

103 Common humanity here is meant as a sense of belonging, derived from sharing values and responsibility and respecting differences and diversity: UNESCO Associated Schools Network, <<https://aspnet.unesco.org/en-us/Pages/Global-Citizenship-Education.aspx>>. Common humanity enables mutual recognition and social inclusion. By highlighting a common identity, it lays the foundation for ‘an ethos of respect for the equal dignity of every individual and hospitality towards the wider world’: ‘Living Together As Equals in Dignity’ (2008) White Paper on Intercultural Dialogue <https://www.coe.int/t/dg4/intercultural/Source/Pub_White_Paper/White%20Paper_final_revised_EN.pdf> accessed 4 October 2019, 14.

104 PVR 108, Student of Pelangi School, Bali, Indonesia, 22 May 2018.

105 721, Student of Green School, Bali, Indonesia, 23 April 2018.

106 814, Student of Green School, Bali, Indonesia, 23 April 2018.

been hurriedly defined as an 'empathy machine'.¹⁰⁷ However, as Zaki has observed, VR and the advantage of creating the impression of 'being there' on their own cannot automatically be considered as leading to empathy.¹⁰⁸

Therefore, the sensation of 'being there' experienced with *Clouds Over Sidra* calls for a careful analysis. As stated above, if taken in isolation, it cannot be automatically linked to empathy. VR is only a platform – dropping an individual virtually in foreign surroundings is no guarantee that they will have an empathic reaction. In this case, however, the impression of 'being there' was accompanied by content which was highly relatable, as discussed in the previous section. This expanded the feeling of being physically present in a distant environment to feeling emotionally connected to such an environment.

This emerged especially from the answers of those who chose *Clouds Over Sidra* in answer to the question 'Which one of the videos helped you more to "put yourself in the shoes of a refugee"?' In this context, 'being there' could be seen as leading to empathy because it was associated with being able to adopt a refugee's perspective and even feeling like a refugee. As one student pointed out: 'it is more likely to feel somebody's emotions when one has the feeling of being in the same room as them'.¹⁰⁹

It is therefore clear that the immersive qualities of VR creating the impression of 'being there' offer an optimal starting point in the process leading to empathy. Nevertheless, we cannot rely on these alone. Instead, they need to be combined with compelling storytelling strategies.¹¹⁰ Showing snippets of real life and telling the story from a child's perspective are features enhanced by the sensation of being in a different environment, thus creating a very powerful combination capable of triggering an empathic reaction, as the study has shown.

4.1.5.4 Discussion about emotional reactivity

The quantitative results aimed at measuring the emotions at the base of reactive empathy revealed very slight differences between *Step into a Refugee Camp* and *Clouds Over Sidra*.

Next to elements such as the depiction of daily life discussed above, a component of the video *Step into a Refugee Camp* that contributed to eliciting reactive empathy was the live streaming of comments from all over the world. These provoked a lot of emotions in the participants who – at least to a certain extent – identified with the people sending in their opinions and questions. Some of the comments were 'heart-warming' and inspired a sense of hope. However, the negative ones were a cause of discomfort – the only emotion that scored higher for *Step into a Refugee Camp*. To cite one student: 'I just think its monstrous how some people have absolutely no empathy for these refugees. They've lost their homes and parts of their families... I honestly believe that anyone who can look at the distress these people are in and genuinely not care isn't human'.¹¹¹

The reactions triggered by the comments must be noted because they could have two opposite outcomes. On the one hand they might lead to a desire to fight prejudice, on the other hand they might bring about a 'failure of empathy' by posing a real challenge to participants to face the sufferings portrayed. This phenomenon, previously described as cognitive dissonance, was reflected in the answers expressing dislike for the comments.

By contrast, in the case of parallel empathy *Clouds Over Sidra* clearly surpassed *Step into a Refugee Camp*. VR's ability to create the feeling of 'being there', and the focus on only one story showing life in the camp from a child's perspective, enabled participants to step into Sidra's shoes and share her feelings and experiences: 'when you look around it's like you're there and you're going through the same thing'.¹¹²

4.1.6 The role of the novelty effect

When the discussion is focused on VR, the question is often brought up of how much of its effectiveness relates to the novelty effect it might have. This is particularly important to consider, especially because 37 per cent of students participating in the study had never tried VR before, and even those who had did not use it on a regular basis. Frequent use is likely to decrease the enthusiasm with which students welcome this technology. Throughout the questionnaires the idea of VR as being interesting 'just because it is VR' definitely emerged. Adjectives such as 'fun, surprising, cool' were used to describe the VR experience with the risk of trivialising it.

The first action taken to mitigate the novelty effect was to choose another video that was also innovative in its use of technology and social media. Second, the questionnaires revealed that the risk of trivialisation did not materialise; instead VR resulted in an open attitude to learning. Although the concern that this enthusiasm might wane over time is certainly valid, the welcoming reception for VR lent a positive note to the theme of refugees right from the onset. Participants especially appreciated the interactive aspect of VR and noted it helped them feel more involved, focused and engaged: '[i]t was interactive which made me focus'.¹¹³

¹⁰⁷ Milk (n 9).

¹⁰⁸ Zaki (n 59).

¹⁰⁹ 123, Student of Pelangi School, Bali, Indonesia, 22 May 2018.

¹¹⁰ For a discussion of storytelling and VR, see Murray (n 75).

¹¹¹ PVR 102, Student of Pelangi School, Bali, Indonesia, 22 May 2018.

¹¹² 906, Student of Green School, Bali, Indonesia, 21 May 2018.

¹¹³ 908, Student of Green School, Bali, Indonesia, 21 May 2018.

4.1.7 Conclusion

These findings suggest *Clouds Over Sidra* was more effective than *Step into a Refugee Camp* in eliciting empathy. This conclusion has been reached through the analysis of quantitative data and the three main themes – fostering better understanding, the importance of relatability and ‘being there’ – that emerged from the qualitative questions.

In particular, while quantitative data has confirmed the effectiveness of VR in eliciting empathy, qualitative data has helped demonstrate how the immersive qualities of VR interacted with the content in engaging both the cognitive and emotional aspects of empathy and facilitating the process of perspective-taking.

4.2 Part 2: Does empathy lead to responsible agency?

This study showed 80 per cent of participants believed it was their responsibility to help refugees.¹¹⁴ On this premise, this section focuses on what specific form of responsibility the experiences of *Clouds Over Sidra* and *Step into a Refugee Camp* made possible. This will lay the basis for a key component of the study, namely the discussion of the empathy-induced altruism hypothesis. Simply evoking an empathic reaction would not fully serve the purpose of educating young minds about the phenomenon of forced migration unless empathy were followed by some responsible agency.

4.2.1 ‘We are a community, one world’¹¹⁵

The first step into this investigation is the analysis of the answers to the question: ‘Please explain why you think it is or is not our responsibility to help refugees’. An LSE study asserted that representation of refugees based on empathy inspired charitable giving but was also a reminder of refugees’ otherness.¹¹⁶ This was not reflected by the findings of this study. By contrast, 30 per cent of answers fell in line with the theory of the philosopher Martha Nussbaum, who sustains that a cosmopolitan community¹¹⁷ of human beings prevails over communities based on nationality, ethnicity or religion.¹¹⁸ In the words of one participant: ‘We are a community, one world and we have to stand up for each other, take care of each other’.¹¹⁹

This universalist-cosmopolitan philosophy, which is also the foundation of the humanitarian movement embodied by the International Committee of the Red Cross (ICRC),¹²⁰ is based upon the concept that ‘being human’ is enough of a motivation to call for the support of fellow human beings regardless of other factors. As one student put it: ‘we are all humans so we should help each other out’.¹²¹ In addition to this, the other factor that triggered the responsibility to help was our ability to do so, a belief put forward in 15 per cent of the answers. Simply stated: ‘if we are in a position to do so, we should help’.¹²²

The idea of impartiality, another pillar of ICRC’s philosophy,¹²³ also belongs to this ethical position. Not only are refugees human beings and therefore deserving of help, but they are also entitled to equal rights. Sentences such as: ‘they deserve the same treatment as us no matter where [sic] they are from’¹²⁴ demonstrate what Nussbaum (and also the Universal Declaration of Human Rights¹²⁵) asserts, namely the equality of all human beings and consequent rejection of differences on the basis of nationality, ethnicity, etc.¹²⁶

As respondents were able to see refugees as human beings, they could also imagine themselves in the refugees’ place. 10 per cent of participants identified their responsibility to act as a response to the possibility that one day it might be them needing help. In other words, the process of perspective-taking engaged the moral duty to help.

This emphasis on our shared identity as human beings seems in contrast with Broome’s theory, according to which we are so attached to our cultural baggage that empathy cannot help us see another person’s situation. It also appears to contradict De Turk’s conviction that dominant groups tend to universalise their experiences.¹²⁷ This strong belief in

¹¹⁴ See Section 4.3.1 of this paper.

¹¹⁵ TV 117, Student of Green School, Bali, Indonesia, 21 May 2018.

¹¹⁶ L Chouliarakis and T Stolic, ‘Rethinking Humanity and Responsibility in the Refugee ‘Crisis’: A Visual Typology of News Media’ London School of Economics and Political Science <<http://www.lse.ac.uk/media-and-communications/assets/documents/research/projects/media-and-migration/Chouliarakis-and-Stolic-Refugees-Visual-SUBMISSION.pdf>> accessed 4 October 2019.

¹¹⁷ The concept of Nussbaum’s cosmopolitan community is based on the idea that citizens are not loyal to a single state government, but rather bound by a sense of respect for humanity: M Ayaz Naseem and E J Hysop-Margison, ‘Nussbaum’s Concept of Cosmopolitanism: Practical Possibility or Academic Delusion?’ (2006) 15(2) *Paideusis* 52.

¹¹⁸ Cited by D S J Hollenbach, ‘Borders and Duties to the Displaced: Ethical Perspectives on the Refugee Protection System’ (2016) 4(3) *Journal on Migration and Human Security* 149.

¹¹⁹ TV 117 (n 115).

¹²⁰ J Pictet, ‘The Fundamental Principles of the Red Cross: Commentary’ (1979) <<https://www.icrc.org/eng/resources/documents/misc/fundamental-principles-commentary-010179.htm>> accessed 4 October 2019. Hereinafter: ICRC.

¹²¹ TV 919, Student of Green School, Bali, Indonesia, 21 May 2018.

¹²² TV 915, Student of Green School, Bali, Indonesia, 21 May 2018.

¹²³ Pictet (n 120).

¹²⁴ VR 014, Student of Green School, Bali, Indonesia, 21 May 2018.

¹²⁵ Universal Declaration of Human Rights (10 December 1948), U.N.G.A. Res. 217 A (III) (1948).

¹²⁶ Hoffenbach (n 118) 150.

¹²⁷ See Section 2.2.3 of this paper.

a community of equal human beings might be the consequence of having run the study in international schools that have a strong focus on global citizenship. The fact that cross-referencing the answers to this question with nationality data showed this attitude is spread across the board supports this hypothesis. At the same time, it also proves that a type of education aimed at forming global citizens is effective in eliminating cultural barriers.

If cultural differences did not pose an obstacle, neither did physical distance.¹²⁸ By contrast, the dominant attitude was that awareness of the refugees' situation brought out the same moral obligation as physical proximity, thus making it impossible to ignore the duty to lend a hand: 'We can't just watch over this as we travel all around the world not even thinking about those who simply can't even go home'.¹²⁹

4.2.2 *The empathy-altruism hypothesis*

'They are the same species as us, it is our duty to help other humans, no matter how different we think they are. I want to help them'.¹³⁰

One of the aims of the present study is to link the idea of responsibility to that of agency by asking the following question: 'If you agree that we should help refugees, what do you think you could do?' This component of the project attempts to explore the empathy-altruism hypothesis. According to this, empathy can lead to altruism, understood as 'a motivational state with the ultimate goal of increasing another's welfare'.¹³¹ Because of this, fostering empathy can have very positive repercussions on improving societal attitudes towards stigmatised groups and therefore be employed not only in education about refugees, but in all areas dominated by hostility towards refugees.

In order to test the empathy-induced altruism hypothesis, Batson ran several experiments in which he used variables to see how a person might achieve the goal of helping. Among these, there was also a manipulation normally referred to as the 'viability to escape'.¹³² Escape does not allow participants to achieve the goal of helping in an altruistic manner, instead it enables them to distance themselves from the empathic arousal they have experienced.

The analysis of this set of answers searched for strategies employed by respondents to escape. This was a necessary passage in order to discover how many participants limited their involvement after feeling empathy during the viewing of *Step into a Refugee Camp* and *Clouds Over Sidra*. Refusing to answer or giving an impersonal reply were interpreted as attempts not to engage on a personal level with the idea of helping. These findings showed 19 per cent of participants chose not to answer or were not sure what to answer, thought that helping refugees was not their responsibility, were concerned not everybody had the means to do so or attributed the duty to intervene to the government.

Other examples of 'escape' were impersonal replies that amounted to 26 per cent of the total. Among these were many political answers indicating that countries should open their doors to refugees or offer them opportunities and jobs. While these were valid choices of help, they did not demonstrate any form of personal engagement.

By contrast, 56 per cent of the replies contained some form of personal commitment. In this context, by 'personal' is meant all the answers containing the pronouns 'I' and 'we' and those starting with an infinitive verb replying directly to the question – for instance 'send them', 'visit them', etc.

The strongest type of engagement included wanting to connect with refugees either by visiting and helping them in first person or by hosting them. Some respondents had a very personal approach to how they would commit themselves, thinking of how they could help in the specific context of their life. For instance, a participant wrote he was creating a company with the intention of giving some of the profits to refugees because his 'company thinks that everyone deserves a fair chance in life'.¹³³ Another participant wanted to become a journalist and document the refugees' situation.¹³⁴ A final example was the commitment of one student to start looking online for a charity specifically dealing with refugees or getting involved in some refugee project once back in her mother country.¹³⁵

Not surprisingly, 47 per cent of participants went for what one of them defined as 'the easy option'¹³⁶ – the one most accessible, and perhaps realistic for young people still in school: making a donation.

Another concrete way to help put forward by participants was to spread awareness. Their comments revealed the experiences they went through in the study were eye-opening and instilled in them the desire to share what they had learned to the point that 22 per cent chose this as their contribution. Last, a minority of participants also showed their belief in making their voice heard in order to exercise their influence on the government. After learning about the experience of refugees, 4 per cent indicated actions such as protesting and signing petitions as ways to convince their government to have a welcoming attitude towards refugees.

¹²⁸ Physical distance as an obstacle, for instance, was mentioned only by student 728 of Green School, Bali, Indonesia, 23 April 2018.

¹²⁹ 808, Student of Green School, Bali, Indonesia, 23 April 2018.

¹³⁰ 715, Student of Green School, Bali, Indonesia, 23 April 2018.

¹³¹ Batson, 'Empathy-Induced Altruistic Motivation' (n 54) 3 and De Waal (n 48). See also Section 2.2.2 of this paper.

¹³² Batson, 'Empathy-Induced Altruistic Motivation' (n 54) 10.

¹³³ 805, Student of Green School, Bali, Indonesia, 23 April 2018.

¹³⁴ URG 112, Student of Green School, Bali, Indonesia, 21 May 2018.

¹³⁵ VR 114, Student of Green School, Bali, Indonesia, 21 May 2018.

¹³⁶ 816, Student of Green School, Bali, Indonesia, 23 April 2018.

4.2.3 Conclusion

The experiences of *Clouds Over Sidra* and *Step into a Refugee Camp* triggered a form of responsibility based on the ideas of our common humanity, equality and impartiality. In an era where examples of international cooperation are increasingly few and far between, this disregard for differences such as nationality, sovereignty, ethnicity, etc. seems remarkable and perhaps is the consequence of the international environment within which the respondents were based.

The question of whether this kind of responsibility can actually lead to altruistic action can also be answered affirmatively as 56 per cent of respondents showed some level of personal willingness to help. Hence, this result validates the empathy-altruism hypothesis.

Linking these results directly with those of the previous section, clearly demonstrating that *Clouds Over Sidra* was more effective in fostering empathy, we now have a substantial argument as to why VR should be used to educate about refugees. As this section showed, the empathic reactions elicited by VR have the potential to lead to altruism. Because of this, VR could become a real catalyst for improving societal attitudes towards refugees. Therefore, it seems reasonable to recommend that VR experiences be embedded in educational curricula aimed at teaching empathy. Nevertheless, it is also important to point out that definitive conclusions on the connection between VR-induced empathy and altruism could only be reached if participants could be followed over time. Only in that case would it be possible to verify whether exposure to experiences similar to the one in this study does translate into action.

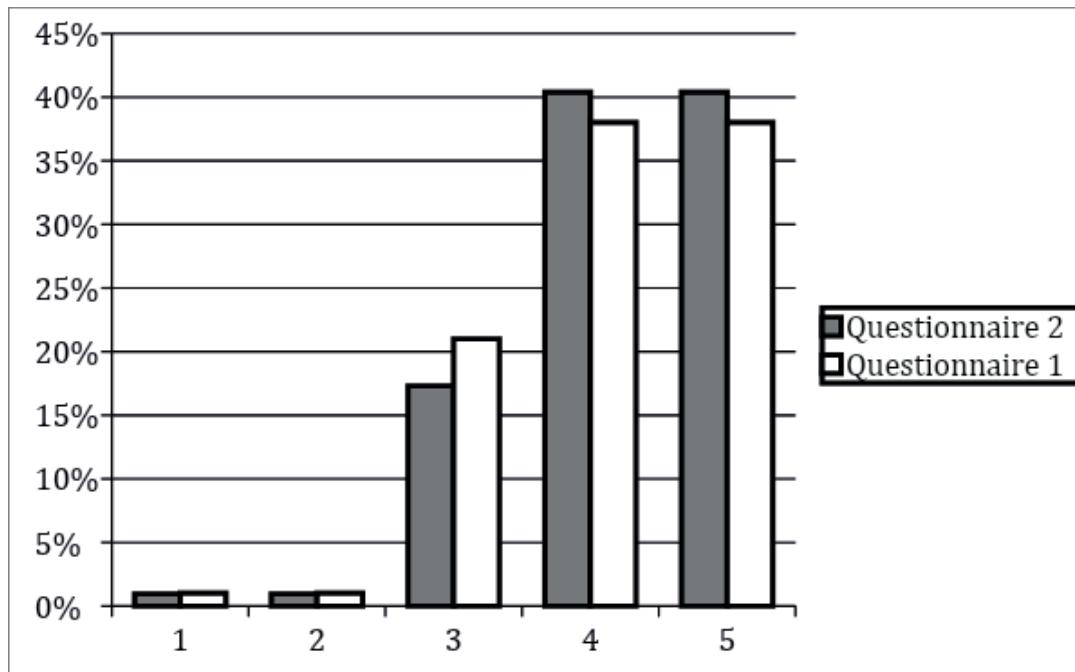
4.3 Part 3: Before and after

Questions about the meaning of the word 'refugee', what to take if forced to flee and whether we are responsible for refugees were designed to compare participants' attitudes before and after undergoing the VR experience of *Clouds Over Sidra* and watching the video *Step into a Refugee Camp*. For this reason, they were added to both the first and second questionnaires. This strategy aimed to establish a benchmark in order to draw some further conclusions on the impact of the study.

4.3.1 The question of responsibility

One of the questions intended to assess the effect of *Clouds Over Sidra* and *Step into a Refugee Camp* concerned the sense of responsibility felt by the respondents towards refugees. It was formulated as follows: 'Do you think it is our responsibility to help refugees?' Participants could choose between the values of 1 (strongly disagree) and 5 (strongly agree).

As the chart shows, the two questionnaires present very similar results – the only slight differences concern an increase of 2 per cent in the number of students who chose the value 4 and 5 and a decrease of 4 per cent in those who selected 3.



Due to the fact that 76 per cent of participants had already chosen 4 and 5 in the first questionnaire, the room for growth was quite limited. These results might therefore be a sign the experience of the two videos had no effect on the respondents or was a confirmation of the opinion they already had.

4.3.2 The meaning of 'refugee'

The other section of the questionnaire aimed at measuring the effect of the two experiences involved questions about the meaning of the word 'refugee' and the items participants would grab if they had to flee in a hurry.

Prior to conducting this study, participants were not provided with any material about refugees. It is nevertheless highly probable some of them covered the topic during their classes or came across it through reading or watching news reports, since 93 per cent of them showed a very good grasp of what 'refugee' meant. This might also be a consequence of the fact that 50 per cent of the participants answered affirmatively to the question: 'Have you ever met a refugee?'

4.3.2.1 Results – Identifying with refugees

69 per cent of respondents correctly identified the component of 'being forced' in the definition of refugee. This is an essential element that contributed to the students' openness to receiving the content of the two videos. As explained in the section on empathy, any empathetic reaction can be influenced by factors such as responsibility and controllability. In this case, the recognition that refugees were forced to flee and therefore not responsible for their own situation enhanced the possibility of empathising with them.

This openness led to 34 per cent of respondents reacting empathically to the experiences of Sidra and the refugees in *Step into a Refugee Camp*. Their answers in the second questionnaire clearly showed they went through a process of identification with the refugees in the videos. Although these replies do not represent the majority, it is still relevant to analyse this result given that being able to identify oneself with another is a definite sign of empathy.

Such a process of identification becomes evident from how the answers were re-worded in the second questionnaire. One of the most noticeable changes was the passage from lexical definitions – 'a refugee is...' – to more personal answers. This is exemplified by the respondents' choice to include what they felt in response to the two videos by adding expressions such as: 'I feel really bad'; 'I think it is really unfair', etc. (14 per cent). This display of concern for other people's experiences can be read as a consequence of feeling empathy for them.¹³⁷

Not only were the participants' feelings mentioned, but also those of the refugees. Sadness came up in 28 per cent of the answers, followed by fear (6 per cent) and hope (6 per cent). Next to the refugees' feelings, some of their qualities, such as braveness (8 per cent) and strength (14 per cent), were also mentioned. Moreover, their situation stopped being described as matter-of-fact displacement. Instead, the emphasis was put on the experience of 'having gone through a lot' (14 per cent). This was also echoed by the preoccupation with the consequences of the flight rather than the reason(s) for it – for instance 19 per cent of answers were focused on the refugees' loss of opportunities (including education).

Echoing the results of the previous section on responsibility, 10 per cent of participants discovered a shared identity with refugees. In this context, it was expressed through the realisation that refugees are 'normal people', 'just like us' who have feelings, are part of a family and have dreams and hopes. For example, the notion of refugees fleeing in order to protect their families and children appeared in seven entries in the second questionnaire versus one in the first.

4.3.2.2 Discussion

Overall, these results confirm the theory that coming into contact with somebody – even through technological devices – hearing their side of the story, seeing where and how they live and learning about their daily struggles, is a very effective way to foster empathy as it allows for a deeper level of identification.¹³⁸ While the within-subjects method does not allow attribution of these findings to either *Clouds Over Sidra* or *Step into a Refugee Camp*, the discussion in Part 1 of this section demonstrated that VR is particularly advantageous in helping viewers identify themselves with refugees because it places them into the scene, gives them the feeling of 'being there' and the freedom to move around and look in all directions.

The role VR might have played in the reformulation of 34 per cent of the refugee definitions is also explained by how information is absorbed through this platform. The section 'Fostering better understanding' showed that VR triggers a process of learning based on both emotional and cognitive empathy. This offers an elucidation as to why some participants changed their answers about the definition of refugees by including the human side of what it means to be forced to leave one's home.

Combined with the findings on responsibility and cosmopolitan ethics, the re-wording of the refugee definition also validates Allport's contact theory, which asserts that 'people...just need a chance to get to know each other and that once this happens, individuals will soon discover that beneath the mantle of group identity rests a much deeper and common identity – that of a human being'.¹³⁹ Although originally this mainly referred to personal contact, the theory now comprises modern technologies, including virtual ones.

Finally, while the experiences of *Clouds Over Sidra* and *Step into a Refugee Camp* most definitely had an impact on the participants' understanding of what it means to be a refugee, at the same time it is possible that the way this

¹³⁷ See Anderson (n 61).

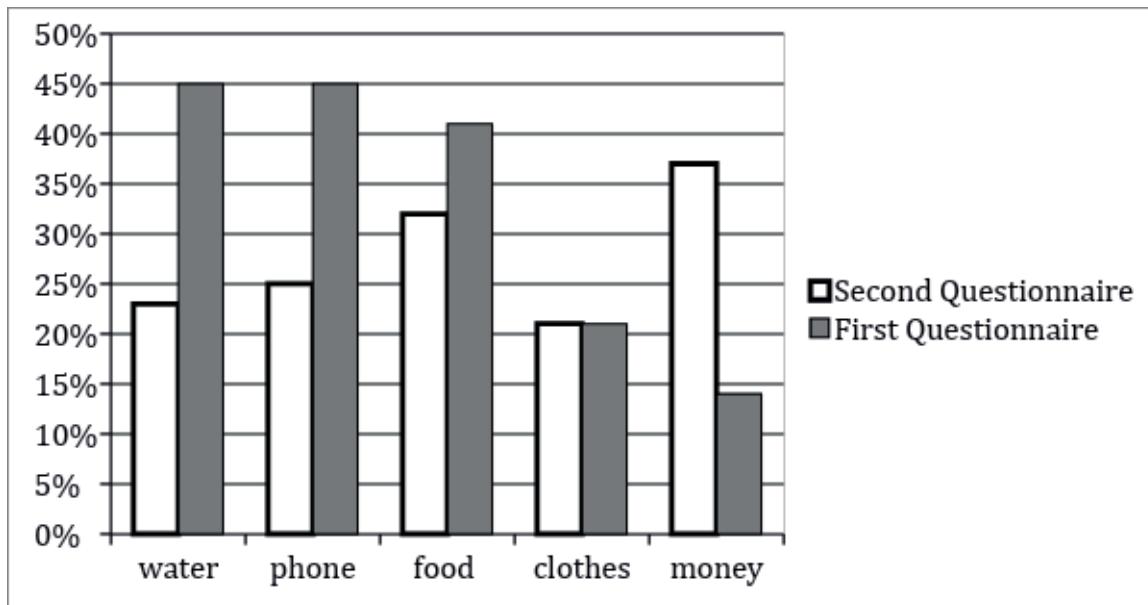
¹³⁸ See Eisenberg, Eggum and Di Giunta (n 56).

¹³⁹ Head (n 51).

question was formulated might also have influenced the students into re-elaborating their answers. Especially, the introduction 'After going through this experience...' might have misled some respondents into thinking they had to change their answer.

4.3.3 Items to grab

The chart below represents the items most frequently mentioned in the two questionnaires.



Interestingly, only 22 per cent of students gave the same reply in both questionnaires. This might be simply because they did not remember exactly what they answered in the first questionnaire, but also because the videos might have highlighted some new needs they had not considered before. This exercise was in fact aimed at making participants imagine themselves in the situation of a refugee.

Answers that deserve particular attention are those that mentioned personal items such as pictures, books, sports equipment, etc. These saw an increase from 21 per cent to 36 per cent. While in the first set of answers, personal items mainly included books (26 per cent) and pictures (43 per cent), in the second questionnaire they expanded to comprise toys/games (33 per cent) and, more generally, items 'that contained a memory', 'that reminded [them] of home', etc. (23 per cent).

Such answers were clearly influenced by the content of the two videos. While prior to undergoing the two experiences – *Clouds Over Sidra* and *Step into a Refugee Camp* – students were primarily focused on fulfilling physical needs, after listening to Sidra and the interviewees in the video, they seemed to have a better understanding of the emotional consequences of displacement.

4.3.4 Conclusion

The quantitative comparison of the sense of responsibility experienced before and after watching the videos did not reveal any noteworthy variations. By contrast, the other two questions presented interesting data. Regarding the meaning of 'refugee', over one third of the answers were changed to reflect a different understanding, involving a sense of identification as well as an appreciation for the human dimension of the refugees' situation. This more personal interpretation was further reflected in the choice of which items to take, which in the second questionnaire included more memory-related objects. Unfortunately, the adoption of the within-subjects design did not allow attribution of these findings to either one experience or the other. Therefore, in this specific context, it was not possible to make conclusive remarks on the effectiveness of VR versus the multimodal video in fostering empathy.

5. Conclusion

The analysis of the data collected during this research project demonstrated how the immersive qualities of VR enhanced the content of *Clouds Over Sidra*. This led to the conclusion that overall the VR experience proved more effective at evoking empathy. It also lent support to the theory that empathy can induce altruism and therefore help improve attitudes towards refugees. On the basis of these findings, compelling content that utilises VR is a recommended addition to school curricula or other programmes aimed at education about refugees. The final aim of this education is to promote a better integration of newcomers into receiving communities by encouraging a deeper understanding of refugee experiences.

Despite the many advantages offered by VR, it is nevertheless important to stress it cannot be an 'empathy machine' on its own as it is only a technological platform that needs quality content in order to deliver its full results. It is therefore crucial to continue working towards understanding and recognising these factors in order to produce VR content with real potential to foster empathy. As Murray has suggested, 'we should look for the specific moments that point to the genuine promise of the medium in creating compassionate understanding, and build on those'.¹⁴⁰ In consideration of VR's potential to offer an augmented experience, academic research has an important role to play in providing an analytical evaluation and critical assessment of content to be used through the medium of VR.

As the discipline of refugee studies evolves in response to external stimuli, it has to broaden its scope to include not only refugees, but also communities hosting refugees. Without the consideration of both sides of integration, refugee studies will not be able to contribute to current debates and stay policy-relevant.¹⁴¹ The discussion of VR and empathy undertaken in this study is an instance of how this field can branch out into other disciplines and find creative solutions to realise its goal of 'combining scholarly research and theorising with advocacy and practice aimed to ameliorate the plight of its objects of study'.¹⁴²

Consequently, this project is an attempt to offer a practical and empirical recommendation based on methodologically sound research to the topic of education about refugees. Empathy is indeed a key component in the process of integration as it can lead to altruism and VR has proven effective in eliciting it. However, while this paper is focused on education about refugees, these findings could be applied to many other areas where attitudes towards refugees need improving. The hope is this research project will inspire others to explore further and find new areas to implement these findings.

140 Murray (n 75).

141 See L B Landau 'Can We Talk and Is Anybody Listening? Reflections on IASFM 10, 'Talking Across Borders: New Dialogues in Forced Migration' (2007) 20(3) Journal of Refugee Studies 335.

142 Schmidt (n 21).



REVIEW

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The potential of games for vulnerable groups like refugees: a scoping review

O potencial de jogos para grupos vulneráveis como refugiados: revisão de escopo

El potencial de los juegos para grupos vulnerables como los refugiados: revisión del alcance

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ABSTRACT

Objective: To map existing studies on the development of games for refugees, identifying the developed games, characteristics and possible application to health care. **Method:** A scoping review study, carried out in July 2022, using the MEDLINE® (Medical Literature Analysis and Retrieval System Online), CINAHL® (Cumulative Index to Nursing and Allied Health Literature), SPORTDiscus, Scopus, SciELO (Scientific Electronic Library Online), Psychology and Behavioral Sciences Collection, Cochrane Central Register of Controlled Trials databases. **Results:** 8 studies were identified, with 8 different types of games published between 2016 and 2022. The characteristics of the games found essentially fall on their use to increase empathy towards refugees. **Conclusion:** This study identifies opportunities to strengthen the current body of knowledge in nursing, using games as ways of welcoming, training and integrating populations in situations of social vulnerability in which refugees find themselves.

DESCRIPTORS

Play and Playthings; Refugees; Gamification; Video Games.

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INTRODUCTION

There are currently millions of forcibly displaced people in the world. Among them, a large number are refugees due to civil wars in Syria, Libya, Afghanistan, Iraq and South Sudan, and, more recently, due to the war in Ukraine⁽¹⁻³⁾. Indeed, refugees' current situation in Europe is the greatest since the Second World War⁽²⁾. In Latin America, due to the severe economic and political instability in Venezuela, Brazil has received a high number of refugees⁽⁴⁾. All these refugee people are at risk of developing various problems.

The refugee crisis is all over the news; we hear, see and read about refugees fleeing war in search of a better place to live. Most governments have been discussing what to do with the large numbers of fugitives and how to provide them with shelter, while others are discussing how to prevent them from crossing their borders and entering their countries⁽⁵⁾.

Refugees' needs are not determined solely by exposure to war and flight, there are life course determinants that also play a large role⁽³⁾. All people, including children, remain subject to levels of discrimination and social marginalization and at enormous risk of violations of their various human rights⁽⁶⁾.

The vast majority of refugees have been exposed to enormous traumas in their home country, such as human rights violations, murder of family members, imprisonment, torture and war⁽¹⁾. In transit to their destination, they are often exposed to physical and sexual violence as well as mistreatment by traffickers and authorities^(1,6). But upon arrival at their destination, refugees are also exposed to post-migration stressors such as feelings of loneliness, rootlessness and social exclusion^(1,7). This segregation, in terms of economy and living space, is also exacerbated by the problems of social exclusion⁽⁷⁾, enhanced by the means of social communication⁽⁸⁾.

All of these factors put immense pressure on and exacerbate the already precarious mental health status of refugees who have already been subjected to trauma⁽¹⁾. This specific group deserves special attention from health professionals, as they have different needs and vulnerabilities with regard to integration and the safeguarding of human rights⁽¹⁾. Health professionals are ethically obligated to prepare a response to public health and health-related issues arising from the refugee movement⁽²⁾.

Aware of the need to intervene at this level, and as the first stage of a study in which a game will be developed to promote refugee integration into health care, we carried out this study.

It is argued that serious games can fill a gap in human rights education⁽⁶⁾, strengthening empathy skills, which is critical to the task of protecting vulnerable populations⁽⁹⁾. Due to the usefulness of digital games in promoting better socio-emotional behaviors, a lot of research has come up with interesting ways to use existing games to build socio-emotional skills⁽¹⁰⁻¹⁴⁾.

Games dealing with topics like refugees also want to convey a political message, making people to think about certain events and reflect on their own behavior⁽¹⁵⁾. Serious games in this field are intended to raise awareness and evoke empathy for the groups represented⁽¹⁶⁾. Players can feel guilt, regret, joy, pride, or shame about choices made in the game and, in the process, become aware and identify different emotions, with

ethical dilemmas, opening doors to true empathy⁽¹⁰⁾. This aspect is important to change stereotypes and improve health professionals' attitudes towards these vulnerable groups. This scoping review aims to map existing studies on the development of games for refugees, identifying the developed games, characteristics and possible application to health care.

METHOD

A scoping review was carried out using the methodological framework developed by JBI Reviewer's Manual for Scoping Reviews⁽¹⁷⁾ and Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR)⁽¹⁸⁾. The objective, in the exploratory phase of this review, was to ensure the absence of a recent research report similar to the subject under study or a record of a review protocol. Subsequently, the research protocol was registered on the Open Science Framework® platform (10.17605/OSF.IO/2VYTW).

SEARCH STRATEGY

A search was carried out in the MEDLINE® (Medical Literature Analysis and Retrieval System Online), CINAHL® (Cumulative Index to Nursing and Allied Health Literature), Scopus, SciELO (Scientific Electronic Library Online), Psychology and Behavioral Sciences Collection and Cochrane Central Register of Controlled Trials databases, according to the appropriate syntax and indexing terms for each database. The search strategy is listed in Chart 1. A gray literature search was conducted using Google Scholar. A search for additional studies was also carried out in the reference lists of included articles through backward citation searching.

RESEARCH QUESTION IDENTIFICATION

This review was driven by the following questions: what games were developed for groups of refugees? What games have been developed to promote the integration of refugee groups? Which games promote greater cultural sensitivity towards refugees? What are the characteristics of games for refugees? What is its possible application to health care?

STUDY SELECTION

The determination of inclusion and exclusion criteria was specified in accordance with the guiding questions, considering Population, Concept and Context. The following criteria were defined: in terms of Population, studies related to vulnerable groups such as refugees were included; in terms of Concept, studies related to the development of games for this population were included; and in terms of Context, all contexts were included, except those referring to refugee children's literacy. No restrictions were made regarding the study design. From a methodological point of view, only studies with reference to some type of game assessment were included. The survey was carried out in August 2022, without time or linguistic limits. Authors of unavailable studies were contacted for clarification or additional information about their studies as suggested by the JBI methodology⁽¹⁷⁾.

Chart 1 – Search strategies according to database/portal. Porto, Portugal, 2022

Database	Search strategy
PubMed	((MH "Refugees") OR (MH "Refugee Camps")OR (MH "Transients and Migrants") OR (MH "Emigrants and Immigrants") OR (MH "Undocumented Immigrants") OR ("Migrant*") OR ("Refugee*")) AND ((MM "Video Games") OR (MM "Games, Recreational") OR (MM "Role Playing") OR ("Game*") OR ("Video Game*") OR ("Virtual game*") OR ("Games Recreational") OR ("Boardgam*") OR ("Experimental Game*") OR ("Board gam*") OR ("Gamification*") OR ("serious game*") OR ("Gameboard*") OR ("Simulation Game*") OR ("Mobile game*") OR ("Computer game*") OR ("Internet game*") OR ("Electronic game*") OR ("Roleplaying") OR ("RPG") OR ("Role playing") OR ("didactic* tool*") OR ("Exergam*")))
CINAHL	((MH "Refugees") OR (MH "Refugee Camps")OR (MH "Transients and Migrants") OR (MH "Emigrants and Immigrants") OR (MH "Undocumented Immigrants") OR (MH "Immigrants") OR ("Migrant*") OR ("Refugee*")) AND ((MM "Video Games") OR (MM "Games") OR (MM "Role Playing") OR ("Game*") OR ("Video Games") OR ("Virtual game*") OR ("Games Recreational") OR ("Boardgam*") OR ("Experimental Game*") OR ("Board gam*") OR ("Gamification*") OR ("serious game*") OR ("Gameboard*") OR ("Simulation Game*") OR ("Mobile game*") OR ("Computer game*") OR ("Internet game*") OR ("Electronic game*") OR ("Roleplaying") OR ("RPG") OR ("Role playing") OR ("didactic* tool*") OR ("Exergam*"))))
Cochrane	((("Refugee") OR ("Migrant") OR ("Refugees")) AND (("Game") OR ("Video Games") OR ("Virtual game") OR ("Games Recreational") OR ("Boardgame") OR ("Experimental Game") OR ("Board game") OR ("Gamification") OR ("serious game") OR ("Gameboarde") OR ("Simulation Game") OR ("Mobile game") OR ("Computer game") OR ("Internet game") OR ("Electronic game") OR ("Roleplaying") OR ("RPG") OR ("Role playing") OR ("didactic tool") OR ("Exergame"))))
Psych	((DE "REFUGEES") OR (DE "REFUGEES -- Social conditions") OR (DE "IMMIGRANTS") OR (DE "EMIGRATION & immigration") OR (DE "REFUGEES -- Government policy") OR (DE "UNDOCUMENTED immigrants") OR ("Refugee*") OR ("Migrant*")) AND ((DE "GAMES") OR (DE "GAMES & psychology") OR (DE "GAMES & technology") OR (DE "GAMES -- Social aspects") OR (DE "GAMES -- Therapeutic use") OR (DE "GAMEBOARDS") OR (DE "VIDEO games") OR (DE "BOARD gamers") OR (DE "BOARD games") OR (DE "ROLEPLAYING games") OR (DE "GAMIFICATION") OR (DE "SIMULATION games") OR (DE "ELECTRONIC artificial life games") OR (DE "ELECTRONIC management games") OR (DE "MOBILE games") OR (DE "COMPUTER games") OR (DE "MOBILE games") OR (DE "INTERNET games") OR ("Game*") OR ("Video Games") OR ("Virtual game*") OR ("Games Recreational") OR ("Boardgam*") OR ("Experimental Game*") OR ("Board gam*") OR ("Gamification*") OR ("serious game*") OR ("Gameboard*") OR ("Simulation Game*") OR ("Mobile game*") OR ("Computer game*") OR ("Internet game*") OR ("Electronic game*") OR ("Roleplaying") OR ("RPG") OR ("Role playing") OR ("didactic tool") OR ("Exergame*"))))
Scopus	(TITLE-ABS-KEY ((Refugee) OR (Migrant) OR (Refugees)) AND TITLE-ABS-KEY ((Game) OR (Video Games) OR (Virtual game) OR (Games Recreational) OR (Boardgame) OR (Experimental Game) OR (Board game) OR (Gamification) OR (serious game) OR (Gameboarde) OR (Simulation Game) OR (Mobile game) OR (Computer game) OR (Internet game) OR (Electronic game) OR (Roleplaying) OR (RPG) OR (Role playing) OR (didactic tool) OR (Exergame)))
SciELO	((("Refugee") OR ("Migrant") OR ("Refugees")) AND (("Game") OR ("Video Games") OR ("Virtual game") OR ("Games Recreational") OR ("Boardgame") OR ("Experimental Game") OR ("Board game") OR ("Gamification") OR ("serious game") OR ("Gameboarde") OR ("Simulation Game") OR ("Mobile game") OR ("Computer game") OR ("Internet game") OR ("Electronic game") OR ("Roleplaying") OR ("RPG") OR ("Role playing") OR ("didactic tool") OR ("Exergame"))))

DATA EXTRACTION

For the first stages of data selection, we used the Rayyan QCRI® platform (the Systematic Reviews web app). The results were assessed and selected regarding their pertinence for inclusion based on the information provided in title and abstract. Screening was performed by two authors simultaneously, and disagreements about the inclusion of studies were resolved by discussion with a third investigator. Subsequently, the selected articles were subject to a full reading that preceded their integration into the final sample. Figure 1 shows the process of identification and inclusion of articles submitted through PRISMA-ScR⁽¹⁸⁾

DATA SYNTHESIS

In order to systematize the data, extracted articles were compiled descriptively with data on the place where the study was carried out, study objective, study design, participants, game title, game objective and results. In order to facilitate the presentation and discussion of results, the articles were coded, according to Chart 2. Due to the heterogeneous nature of the designs and results of the different studies integrated in the sample, only a descriptive synthesis was carried out.

RESULTS

The search strategy retrieved 988 records. After removing duplicates, 841 records were included for the first screening and title and/or abstract analysis. After the different steps illustrated

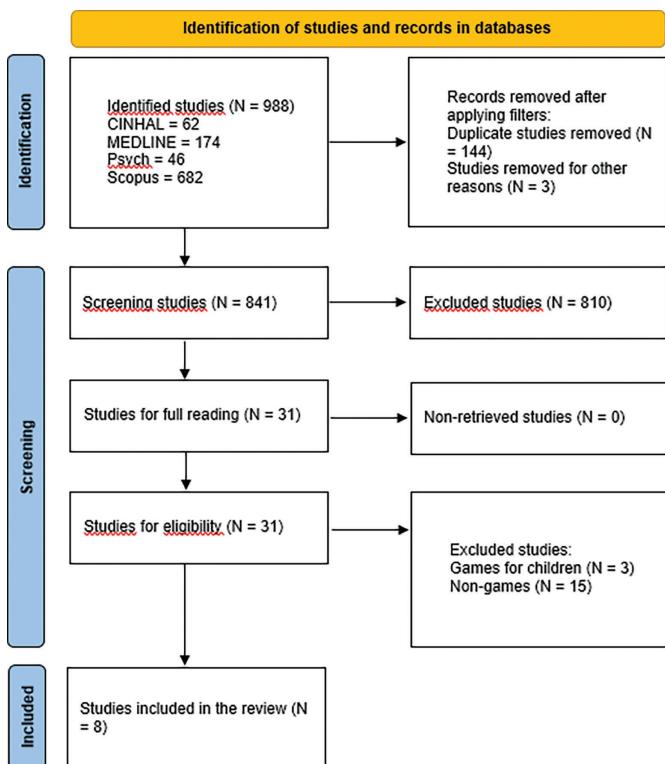
in Figure 1, 8 studies met the eligibility criteria and were included in the analysis.

CHARACTERISTICS OF INCLUDED STUDIES

Chart 2 summarizes the characteristics of the 8 studies included in this review study with regard to authors, year, country, study design, objectives, participants, game title, game objective, ways of assessing the game and results. A total of 8 articles published between 2016 and 2022 were selected for the review^(5,6,9-14). The studies were developed in very different places: Greece; India; Spain; Denmark; United States (n = 2); Germany; and Netherlands. In all studies, 847 people participated in game assessment, including 5 studies with adults, 2 with adolescents, and one with children.

GAME CHARACTERISTICS

As for the type of games developed in the studies under analysis (Chart 3), two were board games^(5,14), one was card games⁽⁹⁾, two were for mobile phones^(10,12), two were digital games^(6,13), and one was virtual reality game⁽¹¹⁾. With regard to game objectives, one of the games refers to actors' knowledge about human rights⁽⁶⁾ and another game refers to raise awareness about refugees' right to privacy⁽⁹⁾, but the most want to increase user empathy towards refugees^(5,10-14). With regard to use in health care, only one of the games was developed specifically to improve cultural sensitivity in the area of health⁽¹³⁾. The characteristics of each game are briefly described as follows.

**Figure 1** – Process of article identification and inclusion – PRISMA.

GAME TITLE

REFUGEE GAME

“Refugee Game”⁽⁵⁾ is a board game with a companion app that addresses the Syrian refugee crisis. The aim is to allow players to simulate the experience of being a Syrian refugee traveling across Europe. Players plan a series of good choices to advance toward the game’s goal, only to discover that external events forced their decisions and made life harder or easier. The companion app is for making global changes to the game state on every playthrough, changing the values and meaning of cards already dealt so that the initial value of a card (e.g. advancing 4 spaces) is suddenly reversed⁽⁵⁾.

THE RIGHTS HERO

“The Rights Hero”⁽⁶⁾ is a prototype digital game for children aged 11 to 18 that can be played on the computer. It was created to be used with refugee children; however, it can also be used by specialists who work with children as an educational support tool. The main objective is for superheroes to make decisions that empower them in different everyday scenarios, such as children who are not accepted at school. Players are faced with different situations that threaten to infringe on superheroes’ human rights and their ability to participate in the host community. Given this, players must choose an action from the

Chart 2 – Characteristics of studies included in the scoping review. Porto, Portugal, 2022

Code	Author, year and country	Study design	Study objective	Participants
S4 ⁽⁵⁾	Therkildsen, Bunkenborg, Larsen (2017) Denmark	Field study - prototype development	Create a board game in the context of the current refugee crisis in Europe with a companion app running on a mobile device.	4 adults 2 men and 2 women between 20 and 30 years old.
S1 ⁽⁶⁾	Dima, Alexandra, Thaleia, Colin (2022) Greece	Field study - prototype development	Reflect on the extent to which serious games can be developed as a useful informal educational tool for the human rights education of displaced children.	30 children, aged between 11 and 18, participated in playtest.
S5 ⁽⁹⁾	Gomez, Newell, Vannini (2020) United States	Field study - prototype development	Discuss using a participatory card game to help raise awareness about protecting privacy.	50 adults in different academic contexts.
S2 ⁽¹⁰⁾	Mukund, Sharma, Srivastva, Sharma, Farber, Chatterjee Singh (2022) United Arab Emirates and India	Quasi-experimental; Pre- and post-test assessments in just one group	Investigate the efficacy of a digital game-based course to build domain knowledge and social emotional competencies of empathy and compassion in adolescents.	201 adolescents between 13 and 18 years old. 89 were from India and 112 from the United Arab Emirates.
S8 ⁽¹¹⁾	Kors, Ferri, Van der Spek, Ketel, Schouten (2016) Netherlands	Field study - prototype development	Describe an exploratory study on the design of a mixed reality empathy-arousing game.	70 adults participated in the study. Group 1 had a total of 32 participants. Group 2 had 38 participants.
S7 ⁽¹²⁾	Neuenhaus, Maha Aly (2017) Germany	Field study - prototype development	Develop a mobile app with game as a different way to put people in touch, refugees and Germans.	8 adults participated in the ex-post-facto test to identify their long-term empathy.
S6 ⁽¹³⁾	Hershberger, Pei, Crawford, Neeley, Wischgoll, Patel, et al. (2020) United States	Quasi-experimental; Pre- and post-test assessments in just one group	Raise provider awareness of the importance of understanding the individual perspective and experiences of members of groups for whom there are likely to be implicit biases.	364 clinical and non-clinical health professionals who performed simulation, 158 subjects answered pre- and post-simulation questions.
S3 ⁽¹⁴⁾	Montag (2020) Spain	Field study - prototype development	Explain the design process, the game mechanics, the different tested game formats, the feedback from the general public, academics and students that have played it.	120 Spanish students between 16 and 19 years old.

Chart 3 – Characteristics of games included in the scoping review. Porto, Portugal, 2022

Code	Game title	Game objective	Assessment	Results
S4 ⁽⁵⁾	Refugee Game (Board game with companion app)	Allow players to simulate the experience of being a Syrian refugee traveling across Europe.	Game test observation.	The included competition element did not seem to bother players. The game quickly opened up possibilities to become a game that a family could play together.
S1 ⁽⁶⁾	Rights Hero (Digital game)	Help migrant and refugee children learn about their rights and feel empowered to use them to respond to situations in everyday life.	Discussion focus group.	Preliminary test results indicate that the "Rights Hero" game has the potential to serve as a transformative tool for learning, incorporating and practicing human rights principles for migrant and refugee children.
S5 ⁽⁹⁾	Mind the Five (Cards game)	Help raise awareness about protecting the privacy of undocumented migrants and refugees (participatory cards game).	Anonymous questionnaire.	Practitioners reflected on a number of things related to their work that the game helped them to conceptualize. The game made participants understand that some data privacy issues can be avoided with more targeted educational activities for both employees and customers/users.
S2 ⁽¹⁰⁾	Bury me, my Love (App game)	Build socio-emotional skills such as empathy and compassion, along with knowledge and attitudes about the refugee crisis and people from different cultural backgrounds.	Basic Empathy Scale (BES) Knowledge and Attitudes Scale Compassionate Engagement and Action Scales.	Greater intervention effects were obtained for both knowledge and socio-emotional learning in students from the United Arab Emirates and India.
S8 ⁽¹¹⁾	A Breathtaking Journey (ABT) (A mixed reality game with virtual reality)	Awaken empathy for refugees.	Group 1 is to assess people's attitude (before the game). Group 2, after playing, contributes to the qualitative assessment of ABT's effects.	Four categories that emerged from the content analysis were identified (Socially Shared Narrative Schemes; Narrative Interpolations; Emotional Markers; Embodied Feelings).
S7 ⁽¹²⁾	Empathy Up (App game)	Smooth or level out the differences between Germans and Syrians and create an emotional bond or empathy between them.	Questionnaire on attitudes towards the will to help refugees and the idea of volunteering to find and help ex-post-facto refugees.	There were significant differences in attitudes towards wanting to help refugees, giving them little tangible things ($p = 0.047$) as well as the idea of volunteering to find and help refugees ($p = 0.02$).
S6 ⁽¹³⁾	Life Course Game (Virtual digital game)	Improve cultural sensitivity in health care (interactive game with immersion in virtual reality).	Questionnaire developed by the authors about emotion, expectations, attributions and motivation.	Post-simulation data indicated an increase in feelings of compassion towards patients. After the simulation, the participants were less inclined to see the patient as primarily responsible for their situation.
S3 ⁽¹⁴⁾	Refugeoly (Board game)	Understand a humanitarian crisis, based on real facts of refugees' dramatic journey.	Inquiry on game assessment.	Of 120 searches, the most repeated word to define the game "Refugeoly" ($N = 60$) was "fun", followed by "interesting" ($N = 35$) and "learning" ($N = 7$). The data shows that "Refugeoly" is a fun game, in which the worst scenarios of the game, such as the danger of dying and the injustice of having to pay the mafia, leave a strong impression in players' memory.

available options. Whenever superheroes do not take proper action, thus not exercising their respective human right, their resilience is depleted, the scenario is not resolved and, in some cases, the game communicates the consequences of the wrong choice to players⁽⁶⁾.

MIND THE FIVE

"Mind the Five"⁽⁹⁾ is a participatory card game to help raise awareness of privacy protections for undocumented migrants or refugees. It can be used in small humanitarian organizations to promote safe and engaging information spaces for migrants and refugees. A player picks up a card of each type, and has one minute to describe an informational behavior, which corresponds to the INFO card, a type of organization, which corresponds to the ORG card, and which deserves the rating, which corresponds to the RATE card. The next player draws

cards and plays the same way. After a few players have played the game, they can begin to discuss the types of information practices in their organization and how they affect vulnerable groups' privacy⁽⁹⁾.

BURY ME, MY LOVE

"Bury me, my Love"⁽¹⁰⁾ is a mobile game whose name is a Syrian farewell phrase that roughly means: "Take care, do not even think about dying before me". This game tells the story of a young woman who is trying to escape the war in Syria^(15,16). Players, however, take on the role of a husband of a woman who has to stay behind. The story unfolds through text messages, emojis and photos that the couple sends each other⁽¹⁰⁾. Players first encounter factors that cause sudden migration (e.g., civil war), and then are forced to guide characters through a series of ethical dilemmas. During the game, there are always references

to the political situation as well as people who want to profit from the desperate situation of those who want to leave the country or information about how other countries deal with refugees⁽¹⁵⁾. In storytelling, players are often thrown into small decisions that reflect ethical dilemmas⁽¹⁶⁾.

A BREATHTAKING JOURNEY (ABTJ)

“A Breathtaking Journey”⁽¹¹⁾ (ABTJ) is a mixed-reality, virtual-reality game that offers a first-person perspective of a refugee’s journey. ABTJ puts players in the shoes of a refugee who flees a war-torn country, hiding in the back of a truck, to reach a safe haven. ABTJ’s virtual experience, via goggles and sound device, is augmented with a variety of physical elements, including a mask, which utilizes a breath sensor, a scent diffuser, which mimics the interior of a truck, an unbalance motor, to simulate movement, and a controlled shutter to drop objects on players during gameplay⁽¹¹⁾.

EMPATHY UP

“Empathy Up”⁽¹²⁾ is a mobile game to increase empathy and try to reduce prejudices of German people against Syrian refugees. It uses a geolocation system inspired by a mixture of “Pokémon Go” and “Geo Caching”. It is like “Pokémon Go”, when moving from one place to another through a copy of a map reality, and like “Geo Caching”, which looks for certain points to allow contact with different cultural characteristics. The game allows players (Syrians and Germans) to understand more about Syrian culture, experience what refugees have gone through and finally meet each other to achieve real and direct contact⁽¹²⁾.

LIFE COURSE GAME

“Life Course Game”⁽¹³⁾ is an immersive virtual reality interactive game to improve cultural sensitivity in health care. It was originally developed and produced in 2008 by City-MatCH, and in 2017 Wright State University adapted the game to a digital and online version so that numerous medical students could play the game simultaneously. One of the game’s characters is a Syrian refugee with limited English proficiency. At age 30, the “Life Course Game” portion of simulation ends, and an immersive virtual reality (VR) scenario begins as individuals go to receive care at a community health center. VR includes four elements of the health center visit: preparation and transportation for the appointment; check-in at the health center; interaction with health professionals; and filling of prescriptions⁽¹³⁾.

REFUGEOLY

“Refugeoly”⁽¹⁴⁾ is a board game based on the classic Monopoly model, taking on the term “Refugeoly” due to the combination of “Refugee” and “Monopoly”. It was built on refugees’ testimonies and non-governmental organization (NGO) volunteers in refugee camps in Greece, Turkey, Spain and France. The squares on the board are numbered from 0 to 39. The simply square structure helps to build, chronologically, the different situations that occur in refugees’ journey. There are

three banks in the game: Player Expenses, where players put money they spend along the way; Banking is the Mafia, where most of players’ money ends up paying for a place on a boat to cross the Mediterranean, or on an illegal trip; Bank, which is an NGO. Players’ emotions keep growing as the game goes on, taking players back to the country of conflict⁽¹⁴⁾.

Although only one of the studies is directly applied to health care, it is observed that the games presented can promote sensitivity to refugees’ human rights, in addition to being an effective way to raise awareness about the problems they face as well as educating health professionals about the human rights of this population.

DISCUSSION

From the perspective of developing a game to promote vulnerable group integration into health care, such as refugees, scientific evidence published in the literature on this topic was mapped. Thus, we analyzed and discussed the results in light of the questions that guided the scoping review. The first question concerns what games were developed for refugee groups. From this review, 8 studies with relatively recent studies were analyzed, between 2016 and 2022, given that the research did not delimit temporal spaces and 8 games were identified^(5,6,9-14).

Although the allusion to this type of game is recent, the “Escape from Woomera” game was developed in 2003, and was one of the first attempts to focus on human rights in a digital game; this and others are not documented in an article, nor do they allude to their assessment process^(15,16). Similar results were obtained in a systematic review study that aimed to identify the mobile applications available for refugees, where authors report that there is a limited number of articles on mobile education for refugees, most of which date from 2018, also related to the rapid increase in applications furniture from last years⁽¹⁹⁾.

Another issue that motivated this review was to identify which games promote the integration of groups of refugees. On this subject, only “Empathy UP” has the real intention of integrating this group. This is supposed to happen through the game’s characters, setting and story that encourages the emotional connection between the two players (locals and refugees) until they actually find themselves face to face at the end of the game⁽¹²⁾. On the other hand, “Rights Hero” promotes children to learn human rights, and its main objective is to help migrant and refugee children learn their rights and feel empowered to use them, with a view to responding to everyday life situations and indirectly, helping child integration into the communities in which they live⁽⁶⁾.

The others^(5,9-12,14) are games to reduce stereotypes and improve empathy, which allows us to answer the second question of this review about games that promote greater cultural sensitivity towards refugees. Hearing, seeing and feeling refugees’ stories can develop empathy in users and increase their knowledge and understanding of their lives, needs and desires⁽²⁰⁾. Refugee stories function, therefore, as a second-order form of engagement with the refugees themselves and as a gesture to demonstrate trustworthiness^(20,21). The stories visible

in the games allude to attitudes, values and judgments in order to reflect, recognize, empathize with or criticize human rights violations^(15,16). Analyzing these last games, it is observed that most games are immersive in which users experience the refugee role^(5,10,11,13,14).

Finally, with regard to its possible application to health care, only one of the studies focuses on its use in health professionals⁽¹³⁾. Indeed, the use of simulation games so far suggests that they can be initiatives that allow increasing individuals' cultural proficiency in health professions⁽¹³⁾. The growth of the refugee population and their access to health care can lead to prejudices and negative attitudes^(22,23). Health professionals are no less susceptible to bias than others⁽¹³⁾. A biased and negative approach by health professionals, including nurses, can negatively affect health care quality⁽²²⁾. The use of interactive simulation with games, in which a participant has a window into life course and experience of a patient for whom one may have negative prejudices, may result in less negative emotional responses and attitudes⁽¹³⁾. Moreover, it has been suggested that such negative attitudes can make it difficult for users to adhere to treatment, reducing the rate of use of health services and negatively affecting refugees' physical and mental health⁽²²⁾.

On the other hand, there is an urgent need for access and integration to health systems, given a vulnerable group that is faced with certain challenges in accessing health, including financial, administrative, language and cultural barriers as well as an insufficient understanding of how health care is organized and delivered⁽²⁴⁾. It should be remembered that refugees are at greater risk of health problems, particularly mental ones, due to the high levels of trauma they have been subjected to⁽⁴⁾. These factors demonstrate a pressing need for their access and integration into health systems, especially through digital resources⁽²⁴⁾, where it is possible to allocate the games. In view of this evidence, one might think that the creation and use of games both in the context of training health professionals and in accessing care can be an added value.

STUDY LIMITATIONS

This path has some limitations, as only studies published with reference to game assessment were included. However, this criterion was chosen to improve quality and provide more reliable information about the games. Furthermore, one of the difficulties was the lack of specification regarding the assessment strategies of the games used in the studies.

CONTRIBUTIONS TO HEALTH-RELATED RESEARCH

This review suggests opportunities to strengthen the current body of knowledge in health and nursing, using new forms of reception, training and integration of populations in situations of social vulnerability in which refugees find themselves.

CONCLUSION

This path allowed answering the questions that guided this research through a scoping review study with the objective of mapping existing studies on the subject, identifying the developed games, characteristics and possible application to health care. 8 studies were identified, with 8 different types of games published between 2016 and 2022. The characteristics of the games found essentially fall on their use to increase empathy towards refugees, putting players in others' shoes, building empathy through identification and reflection. With regard to its application in health care, its use was observed in only one of the studies. However, the rest of the games allowed to address a variety of issues related to refugees, such as difficulties they face when seeking asylum, discrimination they face in their host countries, difficulties in adapting to a new culture and the need to protect their basic human rights. Moreover, games can help reduce the stigma associated with refugees and promote greater empathy and compassion in health care and by health professionals.

It is argued that, despite the important challenges, serious games can fill a gap in health professional training, but also in access to care, as more research using games is needed to determine their effectiveness.

RESUMO

Objetivo: Mapear os estudos existentes sobre o desenvolvimento de jogos para refugiados, identificando os jogos desenvolvidos, características e possível aplicação aos cuidados de saúde. **Método:** Estudo de revisão de escopo, realizado em julho de 2022, utilizando as bases de dados MEDLINE® (*Medical Literature Analysis and Retrieval System Online*), CINAHL® (*Cumulative Index to Nursing and Allied Health Literature*), SPORTDiscus, Scopus, SciELO (*Scientific Electronic Library Online*), *Psychology and Behavioral Sciences Collection*, *Cochrane Central Register of Controlled Trials*. **Resultados:** Foram identificados 8 estudos, com 8 diferentes tipos de jogos publicados entre 2016 e 2022. As características dos jogos encontrados recaem essencialmente sobre a sua utilização para aumentar a empatia para com os refugiados. **Conclusão:** Este estudo identifica oportunidades para fortalecer o atual corpo de conhecimento em enfermagem, utilizando jogos como formas de acolhimento, formação e integração de populações em situação de vulnerabilidade social em que se encontram os refugiados.

DESCRITORES

Jogos e Brinquedos; Refugiados; Gamificação; Jogos de Vídeo.

RESUMEN

Objetivo: Mapear los estudios existentes sobre el desarrollo de juegos para refugiados, identificando los juegos desarrollados, sus características y su posible aplicación a la atención de salud. **Método:** Estudio de revisión de alcance, realizado en julio de 2022, utilizando las bases de datos MEDLINE® (Medical Literature Analysis and Retrieval System Online), CINAHL® (Cumulative Index to Nursing and Allied Health Literature), SPORTDiscus, Scopus, SciELO (Scientific Electronic Library Online), Psychology and Behavioral Sciences Collection, Cochrane Central Register of Controlled Trials. **Resultados:** Se identificaron 8 estudios, con 8 tipos diferentes de juegos publicados entre 2016 y 2022.

Las características de los juegos encontrados recaen esencialmente en su uso para aumentar la empatía hacia los refugiados. **Conclusión:** Este estudio identifica oportunidades para fortalecer el conocimiento actual en enfermería, utilizando el juego como forma de acoger, capacitar e integrar a poblaciones en situaciones de vulnerabilidad social en las que se encuentran refugiados.

DESCRIPTORES

Juego e Implementos de Juego; Refugiados; Gamificación; Juegos de Vídeo.

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Video Games and their Correlation to Empathy

How to teach and experience empathic emotion

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Abstract. This article focuses on how video games may trigger empathy. On the one hand, globalization and our fast-changing, globalized world have resulted in an empathy deficit, a situation that calls desperately for a new approach to tackle the empathy issue. On the other hand, recent statistical data has shown that players in some countries today spend on average more than 4 hours weekly playing games. Most past research has found that playing violent games decreases pro-social behavior. However, only a few studies investigate the effects of neutral or pro-social video games. Our study aims to identify several characteristics of four games that seem to promote positive moral and empathy and involves 30 subjects. Specifically, we look into the effects of variation of number of interventions and the correlation with perceived presence and immersion. The research reported in this paper covers background and related work on empathy research, existing work on video games for experiencing empathy and the layout of the study. The findings of this initial study on four pro-social games suggest that sufficient story-line of video games can positively impacts aspects such as the 'perspective taking' of players. Findings also indicate that multiple interventions and higher perceived immersion dent to increase the level of empathy. This research may contribute to supporting the promotion and development of the '*games for good*' or '*games for change*' campaign.

Keywords: empathy · pro-social · video games · immersive · presence.

1 Introduction

Empathy is an essential skill, which is of growing importance in our modern and globalized society. Empathy helps persons to cope with interpersonal conflicts both at home and work. It helps us to understand non-verbal communication and supports us to predict the actions and reactions of other people more accurately. Empathy allows us to become happier and can lead to greater personal and professional success (Mc. Donald & Messinger, 2011). However, research has also shown that empathy levels have diminished as a result of lifestyle changes. This includes elements such as an increased "screen-time", information overload,

and lack of attention to character or moral development in primary education (Elmore & Harden, 2013). Exploring ways to experience and teach empathic emotions are thus becoming increasingly important (Dohrenwend, 2018).

Empathy experiences can be triggered by watching movies, reading (fiction) literature, consuming storytelling content, and playing video games or simulators. Mark (2018) stated that "*A book or movie can show us what it is like to be in a character's shoes, but it is the video game that can put us into those shoes*". Although several games related to empathy have been built and released, there is still a lack of evidence that they are a sufficient tool for teaching and experiencing empathy and to link the game experience to real life situations. Most video games do not create empathy, because their chosen storylines do not trigger deep psychological involvement in the characterization (Manney, 2008). In response to this it is thus important to analyze those media and applications, which are known to create empathy and to identify the elements, which can be used as design tools to create experiences that do trigger empathy.

The relevance of empathy research in the game domain is supported by statistics showing that people in some countries, such as the USA, the UK, France, Japan, and South Korea, spend more than 4 hours a week playing video games. It was found that among the countries studied, UK gamers spend 7,5 hours a week playing video games, while South Korean gamers spend an average of 4,42 hours a week on playing games (Gough, 2019). More than 2,5 billion people worldwide play video games (TGGMR, 2016).

Video games are often blamed as being a cause of addiction, aggression, and anti-social behavior and many studies have examined correlations between violent behavior and video games with results that are often highly controversial and diverse. Anderson and Warburton (2012), for instance, claim that indicators of aggression are positively related to video game violence exposure. According to a study by Krahe and Moeler (2010), playing violent video games, increases physical aggression and reduces affective empathy.

In contrast, several studies also show that there is no link between violent behavior and the playing of video games. The Oxford University researchers Przybylski and Weinstein (2019) showed on the basis of a study with 1004 participants who play violent video games that there is no evidence for relating violent game engagement to aggressive behavior.

Nevertheless, playing a video game or watching a movie triggers emotions and these media can be used as a powerful tool to trigger empathy. Greitemeyer et al. (2010) explored the effect of playing video games on empathy and pleasure taken in the misfortune of another person ("schadenfreude" or malicious joy is the German term for this). Their research showed that playing pro-social video games can decrease antisocial aspects and increase the pro-social aspects. Furthermore, they found that exposure to pro-social video games can strengthen interpersonal empathy and also reduce schadenfreude. The research and development of digital games for teaching prosocial and moral development are still limited and in an early stage. More research is needed to understand the potential digital games have for supporting specific learning outcomes. A study on

Philosophy by Coeckelbergh (2007) stated that empirical research is required on the relation between moral development and games in terms of empathy and cosmopolitanism. In this context it is thus essential to explore and discuss further the potential of immersive video games to trigger empathy.

Many pedagogical experts believe that promising methods exist for using technologies such as web-based applications, interactive media, and games to teach empathy. They suggest resources and technologies which are already available and used by young people should be explored and dedicated to promoting empathy in order to turn away from the trends of narcissism, loneliness, and isolation. In this paper we thus aim at investigating the potential of video games for teaching and experiencing empathy in order to address our main research question, which concerns the characteristics of games that promote positive moral and social behavior in the context of empathic abilities.

2 Empathy and Video Games

The popularity of video games has triggered concern among educators, policy-makers and parents. Studies have been conducted in the pedagogical field that investigate the correlation between games and empathy. Most educators who have invited students to play video games have done so as a means of allowing students to experience the value of understanding the perspective of other people.

2.1 Empathy

Empathy can be defined in many contexts and definitions. In general terms, empathy is the ability to sense other people's emotions, coupled with the ability to imagine what someone else might be thinking or feeling. It also defines the understanding and sharing the emotional state of another person, the projection of one's own personality into the personality of this other person and to feel with the heart, see with the eyes, and listen with the ears of another person (Batson et al., 1997; Eisenberg & Eggum, 2009).

According to Davis (1980), empathy has four components: *empathic concern* is an other-oriented feeling of concern for the misfortunes of other people and a sense of sympathy with them. *Fantasy* is a respondent's tendency to transpose themselves imaginatively into the emotions and actions of fictitious characters in books, movies, or plays. *Personal distress* is a self-oriented feeling of personal anxiety and unease intense in interpersonal settings. *Perspective taking* is the tendency to adopt the psychological point of view of others spontaneously.

In a study which explores immersion in persuasive games, the authors found that immersion creates stronger emotion and deeply personal experiences (Hafner & Jansz, 2018). Furthermore, the result of this study suggests a positive relationship between immersion and narratives in interactive media that support player involvement. Their research was focused on persuasive games which target social impacts such as conflict resolution, humanitarian crisis, poverty, war,

and terrorism. They found that narrative depth, identification, and perceived realism contribute to the players' immersive experiences.

2.2 Empathy in video games

Huizinga (1983) defines games as "*an activity which proceeds within certain limits of time and space, in a visible order, according to rules freely accepted, and outside the sphere of necessity or material utility. The play-mood is one of rapture and enthusiasm and is sacred or festive by the occasion. A feeling of exaltation and tension accompanies the action, mirth and relaxation follow*".

Only limited research has been conducted into exploring the effect of playing pro-social games and the influence this has on behavior, the attitude of players, or moral development such as emotional intelligence or empathic ability (Happ, 2013). Empathy has been explored as a mediator for pro-social behavior in a video games context (Prot et al., 2014). In the research area of psychology, the role of empathy as a moderator between the behavior and the corresponding different social situations of the participants has been studied (Watson, 2016). In a couple of studies, the participants were invited to imagine what someone else or they themselves would feel like in a specific situation (Batson, et al., 1997).

On the other hand, the rise of an empathy games genre has triggered some interesting issues about how exactly player should playing them and players' psychological responses to these games (Solberg, 2016). "Empathy games" appear to have a great potential for raising awareness about various real-world issues. In the past two decades news reports have been warned of the dangers implicit in video games. By contrast, Gee (2008) asserted that games embody many of the promising features that should be sought in learning environments.

Research has been conducted in many directions to investigate positive effect of serious games. One philosophy study on computer games suggested that the fundamentals of affects in computer games are goal status evaluations and empathy with game characters (Lankoski, 2007). Furthermore, Lankoski stated that games with characters can influence the emotions of players using affective simulation and the affective expressions of characters where the implied goals take a primary role.

A research of Bachen et al. (2012) examines the impact of 'real life' games that help players to develop inter-cultural knowledge on global empathy. Players acquire experience of what a life could be like in another country, educational system, or when faced with diseases and natural disaster, and in the process they identify with and experience other countries. Cognitive experiences and development might affect the development of experience of global empathy (Bachen et al., 2012)

Another study by Vaughan et al. (2011) investigated effectiveness of gaming in bullying behavior. In this research, computer games are used as bullying prevention tools that provide individualized and cumulative learning of pro-social, attitudes and social skills, which may help to abate bullying behavior and shift the social norms into class. They stated that educational gaming is developing

as a promising area that promotes the effectiveness of an early bullying prevention program for elementary school students. This program will help pupils to develop healthy social relationships throughout their lives.

Happ (2013) found that pro-social game content stirs pro-social behavior and that the effect of empathy depends mainly on the game outcome and the game character. A study by Heron and Belford (2014) stated that there are considerable question marks as to whether games can realistically have any genuine impact on the moral perspective of the players. Furthermore, he stated that more studies are needed to specify whether and how games can support and develop empathy.

A study has been conducted to find the potential of serious games for mental heart treatment. One of the analyzed games, 'That Dragon Cancer', tells the true story of a five years old child who died due to terminal cancer. His parents developed this game to describe the experience of having a child diagnosed with cancer. This game features spoken word poetry, and themes of faith, hope, despair, helplessness and love which may affect the emotions. The mother Amy Green argued for art therapy. She concluded that video games are an important art form and that they are very useful in this area. Furthermore, Green stated that "People focus on the unproductive escapism in games, but that inherent abstraction can help us to experience someone else private grief" (Miller, 2015). Miller suggested that further research in this area is both promising and necessary.

The puzzle game 'Old Man's Journey' was mentioned in the list of 'games we need' by the screen therapy blog which is dedicated to exploring how players can use the time they spend on games to strengthen their emotional intelligence. This game has not only received a couple of awards for its excellent visuals like the 'Apple Design Award', but also for the narrative techniques it uses like the 'Emotional Games Award'. This is due to the fact that this game triggers empathy as it lets the player feel with the old man, who puts a lot of effort into reaching his grandchild. Old Man's Journey is an adventure game which tells the life story of an old fisherman who lives in a seaside village, his precious moments and his losses. This game communicates profound feelings of hope, bliss and regret. In other words, this game has 'emotional impact' on the feelings of players (Ann, 2018).

Another study on the perspective of moral game design has been conducted by de Smale et al. (2017). In this study they analyzed the survival game 'This War of Mine', which was developed and published by 11 bit studio. The game, inspired by the Siege of Sarajevo during the Bosnian War, differs from most war-themed video games by focusing on the civilian experience of war rather than on front-line combat. The authors discovered that in order to create a coherent game-world, it is important to conduct elaborate background research about the topic of the game, in this case war.

By the same token, an autobiography might be a new approach, which can be applied to a game so as to make the players understand and feel the same as another person whose life story and experiences are being related. Path Out is an

example of an adventure game inspired by the autobiography of a young Syrian artist who escaped from civil war in his country (Meier, 2017). This game is an 'eye-opener' for players to better understand the actions of a refugee. Abdullah Karam, the protagonist of Path Out, comments the game scenes himself as is common practice in YouTube videos, an element which adds to the immersion. Apart from being the main character in the game, Karam is also the game artist of Path Out.

3 Evaluation

Based on our initial motivation and findings from literature outlined above, our aim is to investigate how pro-social video games can influence the level of empathy. To this end we cover in the remainder of this section study outline, findings and discussion.

3.1 Study design

Our research is focused on the influence of video games on the empathy level, more specifically the impact of playing neutral or pro-social video games on empathy skill development. This study addresses the following research questions:

- Can pro-social video game experience stimulate empathy? And how influences the number of interventions effects on empathy level?
- Is there a correlation between immersion and presence with empathy?

In order to answer the research questions above, we conducted two experiments toward four neutral or pro-social games getting involved a group of school and university student.

3.2 Setting and instrument

Based on the literature survey outlined above, the study is based on existing work on four pro-social games: That Dragon Cancer, Path Out, Old Man's Journey and This War of Mine. The target age groups varies from roughly teenagers till young adults and is accordingly considered in the study group formation.

Three standardized and validated self-report questionnaires are applied in the study for measuring perceives level of empathy, presence and immersion:

– Interpersonal Reactivity Index Questionnaire (IRIQ)

IRIQ measures four sub-dimensions of empathy based on seven items each: (1) Fantasy measures how strongly the player identifies with fictitious characters. (2) Perspective-taking dimension measures how strongly the player adopts perspective or viewpoint. (3) Empathic concern looks into the degree of experiencing feelings for others. (4) Personal distress measures the feelings of discomfort and anxiety witnessing negative experiences of others. Each question of the IRI questionnaire (IRIQ) is multiple choice using a five-point Likert scale. (Davis, 1980)

– **Immersive Tendency Questionnaire (ITQ)**

The ITQ was created by Witmer & Singer in 1998. This questionnaire assesses immersive tendencies by the feeling of deep involvement in media and games usage. ITQ is a multiple choice questionnaire with a seven-point Likert scale (Witmer & Singer, 1998).

– **Presence Questionnaire (PQ)**

The PQ assesses the sense of presence or subjective experience of being in a specific environment or one particular place (Witmer & Singer, 1996). PQ is designed as multiple choice questionnaire with a seven-point Likert scale.

Following the overall goals of our research, the study is partitioned into two experiments, looking into different user groups and variations of the number of interventions.

Experiment 1 The aim of experiment 1 is to assess a short-term influence of playing neutral or pro-social video games towards the empathy skill.

Sixteen participants were classified into four groups depending on their age. Each group was then asked to play one of four video games, whereby the age rating of the game was matched with the given group age. The chosen games were 'That Dragon Cancer' for group 1 (10 - 13 years old), 'Path Out' for group 2 (14 - 16 years old), 'Old Man's Journey' for group 3 (17 - 18 years old) and 'This War of Mine' for group 4 (over 18 years old).

First, each participant had to fill out the IRIQ as a pre-test. In the next step, each participant was asked to play the game assigned to his group for one to two hours on his or her own. Once the participants finished the previous task, they were asked to redo the IRIQ questionnaire as post-test. In the next step, we compared the pre-test against the post-test for each participant and analyzed the responses of the IRIQ in order to measure the impact of playing those four video games.

Experiment 2 The second experiment focuses on multiple interventions and the influence on empathy experience in three selected games. Also, this experiment investigates the correlation of the perceived presence and immersion with the reported empathy experience.

In the first step, twenty-four selected participants were asked to fill out the IRIQ as a pre-test. The participants were then divided randomly into three groups. Each group was asked to play one of three games, namely 'Path Out', 'This war of Mine' and 'Old mans' journey'. Subjects are asked to play the assigned games more than one time on his or her own. After the participants played the game multiple times on average some two hours, they were asked to complete the post-test by filling in three standardized questionnaires: IRIQ, PQ and ITQ. In this experiment we selected only three games because participants have to fill out ITQ and PQ questionnaires, which are sufficient for players over 14 years old, while 'That dragon cancer' is relevance for 10 - 13 years old. Finally the data analysis has been performed with a main focus in influence empathy level and its correlation with presence and immersion level.

3.3 Study participants

We recruited forty pupils and college students in Lampung Province, Indonesia, who are familiar with video games and spend an average time of 2.95 hours per week playing video games. Participants are teenagers or young adults in the age range of 10-19 years. A demographic overview shown in Table 1.

Table 1. Demographic overview of students

Demographic Aspects	Experiment 1	Experiment2
Age range	10 to 19	16 to 19
Age average in years	14.63	17.29
Standard deviations of age	2.16	0.95
Total participants	16 (100%)	24 (100%)
Female	7 (43.75%)	4 (16.67%)
Male	9 (56.25%)	20 (83.33%)
Number of Interventions	single	multiple

3.4 Findings and discussion

As for experiment 1, the reported level of empathy of 16 subjects from pre-test $M=96.56$ ($SD=13.47$) and post-test $M=98.06$ ($SD=13.18$) do not show notable improvements after one intervention with one of the four selected games (see also Table 2). More specifically, there were 9 (56.3%) who had shown an increasing IRIQ score on the post-test, 2 (12.5%) participants had the same score and 5 (31.2%) participants have a decreasing IRIQ score (see also Figure 1).

As for experiment 2, the reported level on empathy after multiple interventions has increased slightly higher compared to experiment 1. Thus, the empathy level of 24 subjects has risen from pre-test $M=94.54$ ($SD=11.56$) to post-test $M=98.17$ ($SD=16.35$) after playing one of three games multiple times (see also Table 2). More specifically, 14 (58.3%) subjects have shown a higher and 10 (41.7%) had a decreasing IRIQ score (see also Figure 2). Findings also show a perceived level of presence of $M= 156.8$ ($SD=13.4$) and immersion of $M=128.8$ ($SD=11.3$), individual level of the subjects are also illustrated in Figure 3. Focusing further on the influence of perceived presence (PQ) and immersion (ITQ) on the empathy level playing one of the selected games, it can be reported that the highest level of correlation is between the perceived presence and immersion level with an correlation factor of 0.641. Such a correlation is expected as the perceived presence and immersion support each other. As for the correlation with reported empathy level after playing the game, findings reveal a higher correlation factor of 0.408 with immersion levels, compared to the lower correlation factor of 0.322 for the presence level. This indicates, that inducing a higher feeling of immersion supports may positively support a higher feeling of empathy.

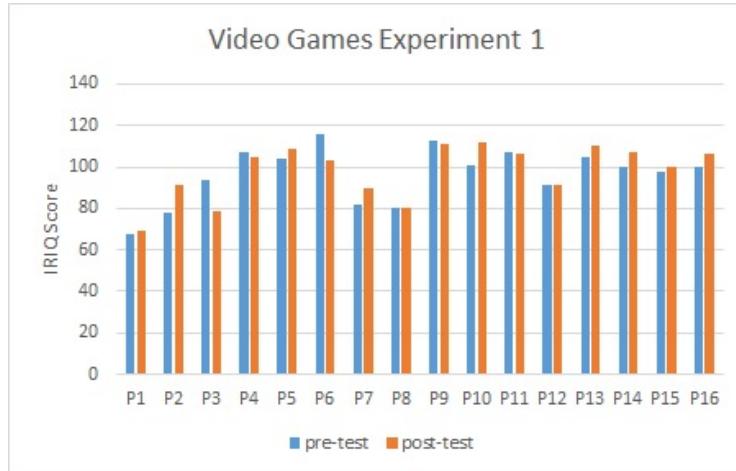


Fig. 1. Experiment 1: Data analysis of four video games related to empathy based on a single intervention and 16 participants between 10 and 19 years old

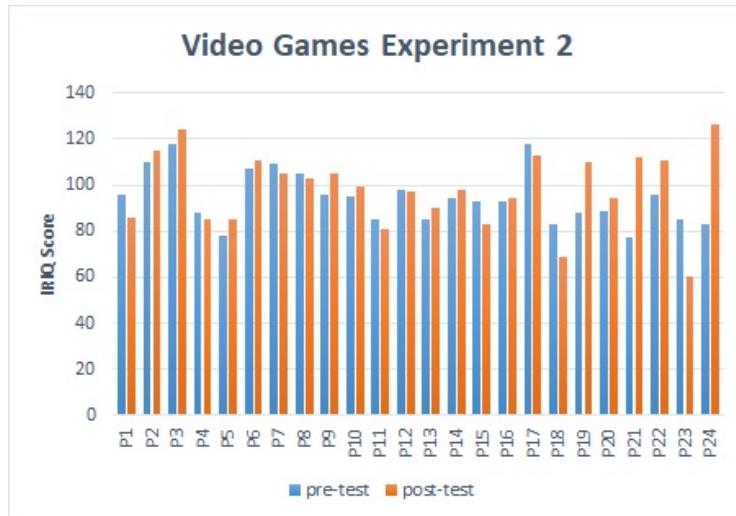


Fig. 2. Experiment 2: Data analysis of three video games related to empathy based on multiple interventions and 24 participants between 16 and 19 years old

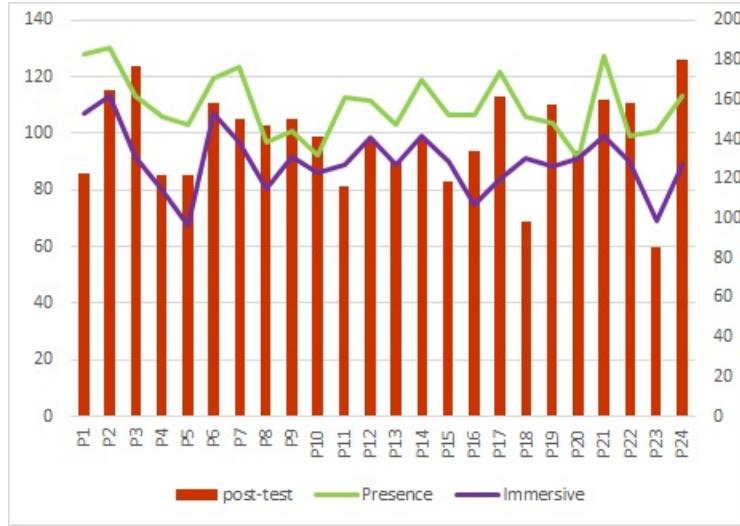


Fig. 3. Experiment 2: Correlation between IRI, Presence and Immersive Score

Finally, some qualitative findings from unstructured interviews of selected participants after playing one of the games are summarized. Subjects stated that the game they played did not have a significant impact on their empathy experience due to either an experienced short or unclear story-line. This might be mainly caused of the limited time and number of interventions. Also language barriers might have influenced the perceived experience. On the positive side, they liked basically the activity and paying a game on raining awareness on such aspects. Replies also revealed, that even the limited time, such games can support to change the player's perspective and induce the player's concern of character and the situation.

Table 2. Data analysis of Video Games Experiments

IRIQ score	Experiment 1	Experiment2
Mean (pre-test)	96,56	94,54
Standard deviations	13,47	11,56
Mean (post-test)	98,06	98,17
Standard deviations	13,18	16,35

4 Conclusions and Future Work

Empathy is an essential skill, which is of growing importance in our modern and globalized society to solve intercultural conflicts and support international

collaborations. Decreasing level of empathy caused by life style changes calls for new forms to experience and event train empathy. Video games in general can change and trigger emotions, pro-social video games in general are perceived to induce empathy.

This research has conducted initial studies on the effects of playing pro-social video games. Specifically the level of empathy and correlations with perceived presence and immersion has been investigated based on single and multiple interventions. Due to the limitations of small numbers of subjects in two experiments, engagement in pro-social video games can positively support the raise of the empathy level. Also a recognized positive correlation between perceived level of empathy and immersion provides room for further investigation on how game story, game type and game elements can support the feeling of empathy.

In future research, a more detailed study with a larger user group is planned, which looks specifically into gender aspects and the sub-dimensions of Interpersonal Reactivity Index Questionnaire (Davis, 1980). Also variations of player behaviour and the perceived level of empathy is a subject of further investigations.

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Moral Dilemmas in Computer Games

Miguel Sicart

- 1 Examples include 2K Marin/Digital Extremes/2K China/Arkane Studios, *Bioshock* (2K Games, 2010); Quantic Dream, *Fahrenheit* (Atari, 2005); Quantic Dream, *Heavy Rain* (Sony Computer Entertainment, 2010); Obsidian Entertainment, *Fallout: New Vegas* (Bethesda Softworks, 2010); Lionhead Studios, *Fable* (Microsoft Game Studios, 2004); Irrational Games, *Bioshock* (2K Games, 2007); and Bethesda Game Studios, *Fallout 3* (Bethesda Softworks/ZeniMax Media, 2008).
- 2 For analyses and critiques of the games, see Miguel Sicart, *The Ethics of Computer Games* (Cambridge, MA: The MIT Press, 2009); and José Zagal, "Ethically Notable Videogames: Moral Dilemmas and Gameplay," (2009) <http://facsrv.cs.depaul.edu/~jzagal/Papers/Zagal-EthicallyNotableVideogames.pdf> (accessed February 27, 2012). Morality and aesthetics are addressed in: Wayne Booth, *The Company We Keep: An Ethics of Fiction* (Berkeley, CA: University of California Press, 1988); and Elisabeth Schellekens, *Aesthetics and Morality* (New York: Continuum, 2007). For explorations of the possibilities in game design, see Raph Koster, *A Theory of Fun for Game Design* (Scottsdale, AZ: Paraglyph Press, 2005); Jonathan Blow, "Design Reboot," (presented at the Montreal Indie Game Summit, November 27, 2007), <http://braid-game.com/news/?p=129> (accessed June 30, 2012); and Richard Rouse III, "Seven Ways a Video Game Can Be Moral," (presented at the Game Developers Conference 2011, March 2, 2011).
- 3 Richard Coyne, "Wicked Problems Revisited," *Design Studies* 26, no. 1 (2005), 5-17.

Introduction

Some of the most popular recent computer games have used morality as a marketing strategy, promising that players' moral choices would critically affect the game experience.¹ Although many of these games have been criticized for proposing shallow dilemmas that do not reflect the ethical possibilities of aesthetic expression, morality nevertheless is a topic that professional game designers increasingly feel the need to address.²

This paper addresses the question of the design of ethical game-based experiences, arguing that developers should focus on presenting players with ill-defined problems that demand ethical thinking and creative engagement as part of the gameplay experience. Taking concepts from design research and philosophical ethics, this paper postulates that game designers have approached morality in games as a tame problem, formalizing decision-making through finite, solvable, computable puzzles.³ This approach has proven commercially successful but aesthetically unsatisfying because it encapsulates the process of ethical thinking in the context of gameplay dynamics, which are not necessarily related to the moral nature of players.⁴

This paper starts with a brief definition of gameplay and ethical gameplay in the context of single-player games. The purpose is to understand what ethical gameplay is and how it has been implemented in computer games. The next section discusses the concept of wicked problems, focusing on how design thinking and moral practices relate. The third section elaborates on why wicked problems can be used for creating ethical gameplay, and the article closes with a short reflection on the implications for game design.

These arguments are illustrated with the critical analysis of existing computer games using the terminology of ethics and design research. This analysis is based on the author's individual experience as a player—a method recognized as a fruitful approach in game studies.⁵ The theoretical findings in this paper have been presented and discussed with individual professional game designers. They have also been used in game development

- 4 Robin Hunicke, Marc LeBlanc, and Robert Zubek, "MDA: A Formal Approach to Game Design and Game Research (2004)," <http://cs.northwestern.edu/~hunicke/pubs/MDA.pdf> (accessed June 30, 2012).
- 5 Espen Aarseth, "Playing Research: Methodological Approaches to Game Analysis" (presented at the Melbourne, Australia DAC Conference, May 19-23, 2003); Mia Consalvo and Nathan Dutton, "Game Analysis: Developing a Methodological Toolkit for the Qualitative Study of Games," *Game Studies* 6, no. 1 (2006), www.gamestudies.org/0601/articles/consalvo_dutton (accessed June 30, 2012).
- 6 Mary Flanagan, *Critical Play: Radical Game Design* (Cambridge, MA: The MIT Press, 2009). Also see Sande Che and David Michael, *Serious Games: Games that Educate, Train, and Inform* (Boston: Thompson Course Technology PTR, 2006); Ian Bogost, *Persuasive Games: The Expressive Power of Videogame* (Cambridge, MA: The MIT Press, 2007); Simon Egenfeldt-Nielsen, *The Educational Potential of Computer Games* (New York: Continuum, 2007).
- 7 Ernest Adams and Andrew Rollings, *On Game Design* (Indianapolis, IN: New Riders, 2003); Tracy Fullerton, *Game Design Workshop: A Playcentric Approach to Creating Innovative Games*, 2nd ed. (Amsterdam: Elsevier, 2008).
- 8 Chris Bateman and Richard Boon, *XXI Century Game Design* (Hingham, MA: Charles River Media, 2006), 127.
- 9 Brian Sutton-Smith, *The Ambiguity of Play* (Cambridge, MA: Harvard University Press, 1997), 303.
- 10 Ibid., 304.
- 11 Bernard Suits, *The Grasshopper: Games, Life and Utopia* (Peterborough, Ontario: Broadview Press, 2005), 54-55.
- 12 Jesper Juul, *Half-Real: Videogames Between Real Rules and Fictional Worlds* (Cambridge, MA: The MIT Press, 2005), 90-91.

workshops in studios located in Copenhagen and the surrounding area. However, this article is intended to be a *philosophical* treatment, focusing on exploring ideas and concepts rather than empirical data.

This paper focuses on the design of ethical gameplay in single-player games. Serious games, as well as political games and other instances of critical play, have been intentionally left out because their sociotechnical conditions of development, distribution, and reception require a different understanding of their design needs.⁶ Similarly, we devote no attention to issues related to unethical content of games, or the morality of playing violent, sexist, or racist-themed games because doing so would require a different theoretical approach.

Defining Ethical Gameplay

The concept of gameplay, even though it is widely used in game design literature, lacks a formal definition.⁷ This makes it more complicated to apply—in particular, when trying to address the ethical or political effects of computer games. This section defines gameplay and ethical gameplay.

On Gameplay

Bateman and Boon define gameplay as "performance oriented stimulation," differentiating between play mediated with toys ("tools[s] for entertainment") and play mediated with games ("a toy with some degree of performance").⁸ Gameplay, then, limits performance, based on the rules of the game and the goals it proposes.

A different take, closer to play theory, is that of Salen and Zimmerman, who define gameplay as "a form of play [...] the formalized interaction that occurs when players follow the rules of a game and experience its system through play."⁹ Gameplay is a subset of play, understood as "free movement within a more rigid structure."¹⁰ This definition recalls Suits's argument that playing a game is the "attempt to achieve a specific state of affairs (prelusory goal), using only means permitted by rules (lusory means), where the rules prohibit use of more efficient in favor of less efficient means (constitutive rules), and where the rules are accepted just because they make possible such activity (lusory attitude)."¹¹

Similarly, Juul argues that gameplay is what results from the interaction between three different elements: 1) the rules of the game; 2) the player's (or players') pursuit of the goal (i.e., the player seeks strategies that work in light of the emergent properties of the game); and 3) the competence of the player and his or her repertoire of strategies and playing methods.¹²

Each of these definitions of gameplay keeps players within their rules-directed interaction with the game system. Players are educated input providers, and their tasks are to create and

- 13 Johan Huizinga, *Homo Ludens: A Study of the Play-Element in Culture* (Boston: Beacon Press, 1992 [1938]).
- 14 Guy Debord and Becker-Ho, *A Game of War* (London: Atlas Press, 2007); Mia Consalvo, *Cheating. Gaining advantage in Videogames* (Cambridge, MA: The MIT Press, 2007); T. L. Taylor, "The Assemblage of Play," *Games and Culture* 4, no. 4 (2009), 331-39; Douglas Wilson and Miguel Sicart, "Now it's personal. On Abusive Game Design" (Paper presented at the Future Play Conference, Vancouver, 2010). Retrieved from: http://dougle.net/articles/Abusive_Game_Design.pdf (accessed April 24, 2013).
- 15 See Roger Caillois, *Man, Play and Games* (Urbana, IL: University of Illinois Press, 2001 [1958]), 12, 23-24, and Chapter 3.
- 16 Hans Georf Gadamer, *Truth and Method*, 2nd ed. (New York: Continuum, 2004 [1960]), 103.
- 17 Ibid., 51, n15.
- 18 See also the concept of gameplay gestalts, in Craig Lindley, "Narrative, Game Play, and Alternative Time Structures for Virtual Environments," in *Technologies for Interactive Digital Storytelling and Entertainment: Proceedings of TIDSE 2004* (Darmstadt, Germany: Springer, 2004), 183-94; Zafer Bilda, Ernest Edmonds, and Linda Candy, "Designing for Creative Engagement," *Design Studies* 29, no. 6 (2008), 525-40.
- 19 Karen Schrier and David Gibson, *Ethics and Game Design: Teaching Values Through Play* (Hershey, NY: Information Science Reference, 2010).
- 20 Jürgen Habermas, *The Theory of Communicative Action* (Boston: Beacon Press, 1984).
- 21 Jonas Heide Smith, *Plans and Purposes: How Videogame Goals Shape Player Behavior* (Thesis, IT University of Copenhagen, 2006): <http://jonassmith.dk/weblog/wp-content/dissertation1-0.pdf> (accessed June 30, 2012).
- 22 Bernie DeKoven, *The Well-Played Game: A Playful Path to Wholeness* (Lincoln, NE: Writers Club Press, 2002).

optimize strategies bound by the rules of the game. These ideas disregard the possibility that gameplay can include all the behaviors that take place inside the "circle" of the game system but are not strictly determined by it.¹³ Thus, this understanding of gameplay ignores instances of appropriative, creative, or *subversive* play.¹⁴

Gameplay is related to the formal properties of a game, understood as the procedural system, but it also defines the player experience and, through it, the meaning of the game. In formal terms, gameplay can be defined as a ludic experience regulated by game rules, mediated by game mechanics, and oriented to the satisfactory achievement of goals predetermined by the game and agreed on by players.

However, space still must be provided for player creativity and agency. Therefore, the ludic experiences to which this definition refers are also activities such as interacting with toys or *ilinx-inducing performances*.¹⁵ Experience is here understood as *Erfahrung*, or true experience: "The work of art has its true being in the fact that it becomes an experience that changes the person who experiences it."¹⁶ Games afford these types of experiences by means of their design, but the will of players to *play* is what makes them ludic experiences. By design, games constrain play into gameplay via their formal properties. In Suits' words, rules are "proscriptions of certain means useful in achieving prelusory goals."¹⁷ Designers create rules and systems to cue certain types of gameplay, but players appropriate those rules and create the space of possibility.

Gameplay is defined by the goals stated by the game system but is actualized by players *when playing*. Thus, gameplay should be understood *from* the rules, but *as* a player experience—a creatively engaging activity.¹⁸ Gameplay, in short, is the designed element of the ludic experience, open toward player appropriation.

On Ethical Gameplay

Computer games and ethics often are brought together in the context of "serious games."¹⁹ Because games are systems, they are optimal for simulating processes, which makes them ideal tools for teaching and persuading about the workings of systems.

From a more philosophical perspective, this approach can be used to argue that games excel at fostering a type of "instrumental rationality" that encourages rational behavior toward predefined goals.²⁰ However, play is not a fully instrumentally rational behavior.²¹ Instead, play has been described as a dialogue—a tension between structure and freedom.²² Game design should try to help the space shaped by those tensions to be productive and meaningful.

Nevertheless, computer games are often designed to encourage instrumental play through the use of goals and rewards and the prevention of catastrophic or irreversible failure. When facing a decision that potentially limits their possibility space, players are often given the option of saving the game state, so that they can explore other options in the future. Making mistakes is encouraged by means of save/reload mechanisms. This type of design encourages instrumental play.

However, instrumentality seems to be at odds with experiences that invoke ethical thinking. Instrumentality calls for “power gaming”—for players to make decisions based on strategies afforded by the game design, rather than on the moral meaning of their actions.²³ In computer games, dilemmas are often designed to illustrate the different “moral paths” a player can follow, but these designs do not force players outside of the behavioral patterns of instrumental rationality because all choices are defined in advance and are reversible as long as the player has saved the state of the game. Players think strategically, not morally. Instrumental play optimizes, by design and by behavior, either the results of the game experience as quantified by the game system (i.e., its goals and challenges) or the results of the social aspects of the game experience (i.e., the so-called “well-played game”).²⁴ Instrumental play is fluid, rewarded, and encouraged by design elements, such as incentives and goals.

Let’s then consider ethical gameplay as the opposite—as a pause. Ethical gameplay happens as a caesura in the act of play, as a moment of hesitation in which the player is not applying social or strategic thinking to engage with the game. Instead, the pause forces the player to apply another type of thinking: *ludic phronesis*.²⁵ *Ludic phronesis* is the practical wisdom that guides decision-making processes based on moral arguments in the context of game experiences.

For *ludic phronesis* to be applicable, players have to be morally invested in the decisions made, and they have to reflect upon the meaning of the choices they are given. *Ludic phronesis* not only affects the moment of choice but also the general sequence and meaning of play. It defines who we are as ethical players of a game. Given these requirements, it also breaks the loop of instrumental play, forcing the player to pause and apply ethical thinking in making a choice.

Ethical gameplay, then, happens as a pause in the fluidity of play—a caesura that forces players to evaluate their behaviors in light of ethical thinking, rather than ludic strategic thinking. Ethical gameplay happens when the game affords a different type of thinking and acting, so that the player as ethical agent is invoked. The question remains: How can a game be designed to create such pauses in play?

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- 23 T. L. Taylor, *Play Between Worlds: Exploring Online Game Culture* (Cambridge, MA: The MIT Press, 2005).
- 24 Richard Buchanan, “Wicked Problems in Design Thinking,” *Design Issues* 8, no. 2 (1992): 5-21.
- 25 Carl Mitcham. “Ethics into Design” in Richard Buchanan and Victor Margolin, Eds., *Discovering Design. Explorations in Design Studies* (Chicago: The University of Chicago Press, 1995), 173-89. See also my own work cited in note 2.

Morality and Wicked Problems

Since the original formulation of wicked problems by Rittel and Webber,²⁶ their relevance in the context of design theory, urban planning, business management and strategy, and design thinking and cognition has often been noted and discussed.²⁷

The concept of wicked problems can be used to define the challenges designers face in their practice. A wicked problem is “a class of social system problems which are ill-formulated, where the information is confusing, where there are many clients and decision-makers with conflicting values, and where the ramifications in the whole system are thoroughly confusing.”²⁸ Wicked problems can also be used to describe any type of problem: “In fact all problems have the character of wicked problems, even math problems or simple puzzles.”²⁹

This notion of wicked problems also resonates with the research on ethical theory and decision-making.³⁰ Whitbeck’s work is an elaboration on that relationship, seeking to establish analogies between ethical thinking and design thinking through the analysis of ethical problems and the different ways that agents solve them.³¹ According to Whitbeck, both ethical and design problems are practical problems; thus, “the similarities between ethical problems and... design problems are instructive for thinking about the resolution of ethical problems and correcting some common fallacies about them.”³²

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- 26 Horst Rittel and Melvin Webber, “Dilemmas in a General Theory of Planning,” *Policy Sciences* 4 (1973): 155-69.
- 27 Buchanan, “Wicked Problems in Design Thinking.”
- 28 Ibid., 15 n32.
- 29 Ibid., 8 n5. However, simple puzzles could be considered as lesser wicked problems.
- 30 Gary Klein, *Streetlights and Shadows. Searching for the Keys to Adaptive Decision Making* (Cambridge, MA: The MIT Press, 2009).
- 31 Caroline Whitbeck, *Ethics in Engineering Practice and Research* (Cambridge: Cambridge University Press, 1998).
- 32 Ibid., 54.
- 33 Shaun Nichols and Ron Mallon, “Moral Dilemmas and Moral Rules,” *Cognition* 100, no. 3 (2003), 530-42; Terrance McConnell, “Moral Dilemmas,” in *The Stanford Encyclopedia of Philosophy*, ed. Edward N. Zalta, <http://plato.stanford.edu/entries/moral-dilemmas/> (accessed on June 30, 2012).
- 34 Whitbeck, *Ethics in Engineering Practice and Research* 57, no. 36.
- 35 Ibid., 54.

Problems and dilemmas can be understood in analogous terms because they define situations in which moral thinking is needed to decide between available choices.³³ Whitbeck explicitly examines dilemmas that are used to illustrate either different ethical theories or particular situations that demand ethical thinking. These dilemmas, she says, are often reductionist in nature, and their philosophical depth is limited by the fact that the dilemma is already designed with the answers in mind: “The view that ethical problems have unique correct solutions is more plausible if one starts from the assumption that possible responses to ethical problems are determined in advance and [are] fairly evident. That would make ethical problems multiple-choice problems.”³⁴

However, ethical problems, like design problems, seldom lend themselves to reductionism. In fact, both ethical thinking and design thinking are attempts to reducing the scope of a problem so that plausible solutions can be found: “Practical problems may or may not have solutions.... Some call for coping rather than for solution.... Both ethical problems that call for solution and those that call for coping have their counterpart in design problems, though good ways of coping are also called ‘solutions’ in the case of design problems.”³⁵

In the context of this paper, “practical problems” are to be considered wicked problems. Wicked problems are structured around imperfect information and a network of outcomes that

make the consequences of decisions difficult to predict. Much like problems of a moral nature, wicked problems require that a particular type of thinking—design thinking—be used to approach the problem and to suggest a number of solutions (references). Given the similarities between wicked problems and ethical problems, we can argue that ethical thinking and design thinking have a number of common traits.

Even though the concept of wicked problems was originally developed to address issues in urban planning, it also has been widely used in design research to describe the types of problems designers face, leading to reflections on what “designerly ways of knowing”³⁶ actually means. Whitbeck elaborated on the analogy between design thinking and ethical thinking. This analogy allows us to establish a relation between ethics and wicked problems that can be fruitful to consider in studying the design of ethical dilemmas in computer games.

Wicked Problems and the Design of Ethical Gameplay

Game designer Sid Meier once defined games as “a series of interesting choices.”³⁷ Meier argued that for players to be engaged in the game, they have to be presented with choices to which they feel emotionally attached, and these choices must not be equally good. The player also should have enough information to make an informed choice, and no single choice should be best.

These general principles have become common lore in game design theory. Most game design texts understand game design as the practice of crafting a system following Meier’s ideals. “Informed choices” has been translated to mean frequent updates on the consequences and motivations for their choices.

In terms of creating ethical gameplay, this player-centric design has been translated into the design of ethical dilemmas. Although ethical dilemmas have been present in single-player computer games since *Ultima IV*, the design of these dilemmas has barely changed: Given a particular situation, a player faces a choice that leads to different narrative paths or gameworld states. Most single-player computer games base their ethical gameplay design on these multiple-choice decision trees. However, following Meier’s maxim, players are often well informed not only about the morality of those choices, but also about the branching narrative. Choices are often presented as either/or, good/bad binaries with relatively predictable outcomes. In this sense, players have enough information to make strategic choices—they are able to minimax the game without necessarily making use of their ethical skills. These designs afford players no caesura.

From a design perspective, this type of dilemma design focuses on creating tame problems: algorithmic, binary state machines wrapped in basic moral dilemmas. In Whitbeck’s terms,

36 Nigel Cross, *Designerly Ways of Knowing* (Basel, Switzerland: Birkhäuser, 2007).

37 See note 10.

"the view that ethical problems have unique correct solutions is more plausible if one starts from the assumption that possible responses to ethical problems are determined in advance and fairly evident. That would make ethical problems multiple-choice problems."³⁸

In current ethical gameplay design practices, then, players are understood as strategic input providers. The actual instances of ethical gameplay design are too careful and too conservative to present ethical challenges as more than mere gameplay challenges; strategic decisions affect what branch of the game narrative or the game world state will be explored when, but they do not challenge the moral decision-making skills of players.

Game design needs to address players as moral agents, providing them with choices that require more than procedural thinking and that are not easily translatable into strategies. In Whitbeck's words, "for the agent facing an ethical problem, not only are the possible responses undefined, but the nature of the problem situation itself is often ambiguous."³⁹ Wicked problems might offer a way of framing the design stance that game developers need to take when creating these types of experiences.

Consider an example from *Fallout 3*. When players discover the Tempenny Tower quest, they find a building in which the dream of a time past is preserved. The dominant cast keeps the population happy but scared, preventing riots by presenting the ghouls that roam just outside the residence as *the enemy*. Throughout the game, however, ghouls are presented as mostly pacific denizens. In this quest, players face a dilemma: They can eliminate all ghouls in the proximity of the Tower, help the ghouls kill the humans, or negotiate peace between both.

The Tempenny Tower quest illustrates how ethical gameplay can be implemented in computer games. Players are presented with a dilemma that demands ethical thinking. Strategically speaking, supporting any faction provides roughly equal "rewards;" therefore, instrumental reasoning will not be sufficient to make a decision. Players have insufficient information regarding the outcomes of their choices, so their main compass is their morality, both as players and as cultural beings outside the game. Of course, the third resolution to the dilemma seems the most ethical. However, players who make that choice will discover, upon later returning to the Tower, that ghouls have killed all the humans. From the perspective of players, the Tempenny Tower quest is a wicked problem.

Fallout 3 has a number of quests that follow this structure: Players are presented with situations with no clear narrative- or system-driven indication as to what choice to make. *Fallout 3* has no game-based ethical system that guides the player toward making a particular moral decision, nor does it have an overarching,

38 Note 36, 57.

39 Ibid, 72.

clearly presented moral system that evaluates players' actions. Hence, given no external systems of evaluation or guidance, the player's values are what guide how dilemmas are resolved.

These quests are presented to players as ill-defined problems: Players have insufficient information about the moral implications of their actions. Also, given how *Fallout 3* is built around principles of gameplay and narrative emergence, players can predict only to a limited extent the outcome of their decisions.⁴⁰ In contrast to more conventional ethical gameplay designs, in which players can calculate the outcome of their decisions based on the externally imposed moral system, in *Fallout 3* morality is not an issue of multiple-choice tests. In its wicked quests, players rather than systems are placed at the center of the design of ethical gameplay, as the system stays open to interpretation.⁴¹

Philosophically speaking, this argument presupposes a constructivist ethics approach, a popular view in ethics and information technology research.⁴² The constructivist argument proposes that for a game to create ethical gameplay, players have to be made responsible for their choices, as well as for their development as moral agents. Players are made responsible when they are encouraged to apply ethical thinking to their gameplay dilemmas. In fact, players construct their meaning of the game by means of their own values.⁴³ Players interpret, accept, and act according to their values in the gameworld, and even if the game system quantizes the output of their actions, their values still are at stake and drive their decisions.

Making players face wicked problems, then, can create ethical gameplay. Game designers seeking to make their players engage their moral values should create wicked problems in their approach to narrative and gameworld design. In addition, because ill-defined problems invoke a type of thinking that is close to moral reflection, game designers could take advantage of that similarity to create dilemmas based on imperfect information and unpredictable outcomes, lacking a telegraphed or easily perceived moral compass.

- 40 Penny Sweetser, *Emergence in Games* (Boston: Charles River Media, 2008).
- 41 Phoebe Sengers and Bill Gaver, "Staying Open to Interpretation: Engaging Multiple Meanings in Design and Evaluation," in *Proceedings of the 6th Conference on Designing Interactive Systems ACM*, New York, 2006), 99-108.
- 42 Terrence Bynum, "Flourishing Ethics," *Ethics and Information Technology* 8, no. 4 (2006): 157-73; Philip Brey, "The Ethics of Representation and Action in Virtual Reality," *Ethics and Information Technology* 1, no. 1 (1999): 5-14.
- 43 John McCarthy and Peter Wright, *Technology as Experience* (Cambridge, MA: The MIT Press, 2004).
- 44 Bill Gaver, "Designing for Homo Ludens, Still," in *(Re)searching the Digital Bauhaus*, ed. Thomas Binder, Jonas Löwgren, and Lone Malmborg (London: Springer, 2009), 163-78.

forces developers to rethink traditional approaches to features such as saving, reloading, milestones, and consequences in the gameworld via systems or narratives.

The design of wicked problems for ethical gameplay clashes with some fundamental traditions and practices in game design. For example, games are always solvable; they are attractive because, unlike moral problems, they are encapsulated systems that provide a resolution to the action. Designers invested in creating compelling ethical experiences through the design of wicked problems should prepare for potential complaints from players used to having adequate information regarding their choices.

Furthermore, the design of wicked problems for ethical gameplay clashes with the fact that almost any state in a game is often savable to memory and therefore reloadable. Games are often designed to allow players to save a particular state; test a solution to a problem; and, in case of an unsatisfactory outcome, reload to the previous state. This reversibility of events is an obstacle in the exploration of ethical gameplay. If a player knows when facing a dilemma that she can return to a previous game state, the potential ethical implications of that choice are diminished. Arguably, computer games traditionally have been designed for instrumental play.

To avoid this problem, designers would have to create the saving systems during their creation of ill-defined ethical dilemmas in games. Creating challenges for players based on wicked problems' characteristics is not enough: Designers also need to address the computational nature of the system and the ways that states are saved and accessed by the player. As this challenge shows, ill-defined problems are defined not only by their semantic level, but also by how the system of rules is designed.⁴⁵ Wicked problems for single-player computer game design are not just representations of morally challenging situations; they also are embedded in the design of the computer program and the system of rules.

Summarizing, if ethical gameplay arises when players engage their ethical capacities in their choices, designers should present players with wicked problems that force them to pause in their instrumental play and apply ethical thinking to their in-game choices.

The Future of Ethical Gameplay Design

This article argues that to design compelling, ethical experiences for games, game developers must create ill-defined problems for players. These problems, while being computable and inscribed within the rules of the game, must also force players to apply moral thinking to their decision-making processes, thereby creating ethical gameplay.

⁴⁵ Miguel Sicart, "The Banality of Simulated Evil: Designing Ethical Gameplay," *Ethics and Information Technology* 11, no. 3 (2009): 191-202.

Designers who aspire to challenge players ethically—to let them experience the world and explore their values through play—should create wicked problems that tease players into playing ethically, engaging with the game using their moral skills. Nevertheless, designers must also recognize that ethical gameplay requires a player who voluntarily *wants to play ethically*—it is a voluntary detachment from instrumental play. Because games are primarily forms of entertainment, players who want to simply enjoy a game by means of instrumental play should also be allowed to do so.

Future Research

Much remains to be done in future ethical gameplay research. One important focus is to better clarify the relationship between such gameplay and critical design theories and practices.⁴⁶ Another important focus would address the work of design researchers who have approached the ludic, reflective, and engaging aspects of interaction design.⁴⁷ Ethical gameplay design has much to learn from the approaches in which the object created is itself critical of the situation, context of use or production, and meanings it creates.

Another area of development is the connection between ethical gameplay and ethical theory. If ethical gameplay implies engaging with a game using moral thinking, and the design of ethical gameplay involves making the player face wicked problems, which ethical theories are applicable to the understanding of these phenomena? As mentioned, constructivism seems a valid approach to understanding the relations between morality and computation because it allows for critical reflection on the agents' values, as well as the systems' values, and how they are interrelated.

The literature on game and ludic design has focused on how players can be engaged through playful systems that appeal to rationality and to the body, to our culture and our dreams. Ethical gameplay design moves us one step further in the direction of understanding what is at stake in our play practices.

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- 46 Anthony Dunne, *Hertzian Tales: Electronic Products, Aesthetic Experience, and Critical Design* (Cambridge, MA: The MIT Press, 2006).
- 47 Phoebe Sengers, Kirsten Boehner, Shay David, and Joseph Kaye, "Reflective Design," in *Proceedings of the 4th Decennial Conference on Critical Computing: Between Sense and Sensibility*, Olav W. Bertelsen, Niels Olof Bouvin, Peter G. Krogh, and Morten Kyng, eds. (New York, NY: ACM, 2005), 49-58.

WINNICOT JEU ET RÉALITÉ, L'ESPACE POTENTIEL 1971 GALLIMARD

L'enfant vient au monde inachevé, démunis, sans possibilités immédiates de distinguer un intérieur et un extérieur, un moi et un non-moi. Le psychanalyste britannique postule que le besoin interne ressenti par l'enfant lui fait créer, de manière hallucinatoire, un objet subjectif apte à apporter la satisfaction.

Les yeux, une mère suffisamment bonne est une mère qui sent suffisamment son nourrisson pour lui présenter l'objet au moment même où celui-ci le crée sur le mode hallucinatoire. Ainsi s'établit progressivement une zone d'*illusion*, espace où l'enfant peut exercer une omnipotence imaginaire, en créant l'objet qui est en fait apporté par l'environnement. Winnicott considère ce paradoxe comme essentiel et constitutif, comme devant être respecté et non réduit. Ce procès de découverte - création de l'objet (*object-presenting*), ainsi que le rôle qu'y joue l'environnement, est capital pour Winnicott, qui le situe dans trois moments ou fonctions de l'apport environnemental : le *holding* de l'enfant, c'est-à-dire le fait qu'il soit tenu (et maintenu) ; le *handling*, la façon dont il est manipulé ; le *taking care*, la façon dont on prend soin de lui (la forme progressive, telle qu'elle s'exprime ici en termes de processus mouvants et d'interaction, est systématique dans cette œuvre, dont elle est une caractéristique majeure). Une étape nouvelle est franchie quand l'enfant, par le jeu (procès essentiel de l'humanisation pour Winnicott), est à même de faire fonctionner pour lui-même cet espace d'*illusion* et d'*omnipotence* : c'est là qu'interviennent l'*espace transitionnel* et les quasi - objets qui y sont mis en jeu, les *objets transitionnels*, objets bien spéciaux (morceau de chiffon, coin de couverture, etc.), qui sont élus par l'enfant et lui servent à expérimenter de façon ludique l'*omnipotence*.

Le self, pour Winnicott, correspond au sentiment d'existence individuelle, d'autonomie, et, plus précisément, au sentiment d'*habitation*, dans le corps, de la psyché. Le vrai self s'édifie dans le rapport du sujet à ses objets subjectifs, créés. Il est, de ce fait, solipsiste, sans communication. Le faux self répond à la nécessité d'une adaptation aux objets objectifs ", présentés par l'environnement. Entre les deux, dans le meilleur des cas, il existe à la fois un écart irréductible et un commerce évolutif. Mais lorsque l'environnement est défavorable et qu'il ne sait ou ne peut coordonner ses offres avec les demandes de l'enfant, un clivage profond vient s'établir en celui-ci, constituant la source de toute pathologie ultérieure. Ainsi voit-on que, contrairement à l'idée qui tend à se répandre, l'opposition entre vrai self et faux self ne recouvre pas l'opposition entre normal et pathologique. Le faux self est, pour Winnicott, une création normale et nécessaire, ne serait-ce que par sa fonction de protection du vrai self. La pathologie ne s'instaure que par la scission radicale entre ces deux aspects de la personnalité.

Des paroles :

« Le soi n'est pas le centre. Il n'est pas non plus l'inaccessible enfoui quelque part dans les replis de l'être. Il se trouve dans l'entre deux du dehors et du dedans, du moi et du non moi, de l'enfant et de sa mère, du corps et du langage. » préface p 14 JB Pontalis

« Je demande qu'un paradoxe soit accepté, toléré, et qu'on puisse admettre qu'il ne soit pas résolu . On peut le résoudre si l'on fuit dans le fonctionnement intellectuel qui clive les choses, mais le prix payé est alors la perte de la valeur du paradoxe. Une fois accepté

et toléré, le paradoxe prend valeur pour tout être humain et est toujours susceptible d'être enrichi par l'exploitation du lien culturel avec le passé et avec le futur » p4

Le "**squiggle**" : tracé libre de l'adulte. On demande à l'enfant d'en faire quelque chose et réciproquement. (ex de l'enfant à la ficelle qui transformait tous les squiggles en objets ficelle : lasso, fouet, ficelle de yoyo... montrant en cela qu'il redoutait la séparation, comme on nie la séparation d'avec un ami en recourant au téléphone) p28 29

La ficelle a pour tout individu une signification symbolique ; une utilisation excessive de la ficelle peut indiquer l'instauration d'un sentiment d'insécurité ou l'idée d'une absence de communication. La fonction de la ficelle peut évoluer passant de la communication au déni de la séparation : il y a là un risque de glissement vers la perversion, la ficelle devenant une chose en soi.

Aire transitionnelle :

« Il existe une troisième aire qui assure une transition entre moi et non moi, la perte et la présence, l'enfant et sa mère. » P 10 péface JB Pontalis

“ Dans la vie de tout être humain il existe une troisième partie que nous ne pouvons ignorer, c'est l'aire transitionnelle d'expérience à laquelle contribuent simultanément la réalité intérieure et la vie extérieure. [...] Cette aire intermédiaire d'expérience, qui n'est pas mise en question quant à son appartenance à la réalité intérieure ou extérieure (partagée), constitue la plus grande partie du vécu du petit enfant. Elle subsistera tout au long de la vie, dans le mode d'expérimentation interne qui caractérise les arts, la religion, la vie imaginaire et le travail scientifique créatif ”. Winnicott(1975, p.25)

L'objet transitionnel est un symbole (premier usage) de l'union du bébé et de la mère en transition entre 2 états : être confondue avec l'enfant et être éprouvée comme un objet perçu plutôt que conçu. P134. L'utilisation de l'objet symbolise l'union de 2 choses désormais séparées.

Le jeu :

En psychothérapie, on a affaire à deux personnes en train de jouer ensemble. Le corollaire est donc que là où le jeu n'est pas possible, le travail du thérapeute vise à amener le patient d'un état où il n'est pas capable de jouer à un état où il est capable de le faire p55

Il ne faut jamais oublier que **jouer est une thérapie en soi**. Faire le nécessaire pour que les enfants soient capables de jouer, c'est une psychothérapie qui a une application immédiate et universelle; elle comporte l'établissement d'une attitude sociale positive envers le jeu. Mais il faut admettre que le jeu est toujours à même de se muer en quelque chose d'effrayant. Et l'on peut tenir les jeux (games), avec ce qu'ils comportent d'organisé, comme une tentative de tenir à distance l'aspect effrayant du jeu (playing). Des personnes responsables doivent être disponibles quand les enfants jouent, mais cela ne signifie pas qu'il leur faut entrer dans le jeu des enfants. (position rééducative) Quand un organisateur est amené à diriger le jeu, cela implique que l'enfant ou les enfants sont incapables de jouer au sens créatif où je l'entends ici.

Ce qui m'importe avant tout, c'est de montrer que jouer, c'est une expérience : toujours une expérience créative, une expérience qui se situe dans le continuum espace-temps, une forme fondamentale de la vie.

Mon but est simplement de rappeler que le jeu des enfants contient tout en lui, bien que le psychothérapeute travaille sur le matériel, sur le contenu du jeu. P71

Jouer doit être un acte spontané et non l'expression d'une soumission ou d'un acquiescement.(attitude du rééducateur)

Le jeu ne relève en fait ni de la réalité psychique intérieure, ni de la réalité extérieure.
P133

Des problèmes :

« On aurait tort de considérer l'affection psychotique comme un effondrement. C'est une organisation défensive liée à une agonie primitive. L'effondrement (le breakdown) redouté parce qu'il menacerait toujours d'avoir lieu dans l'avenir a en fait déjà eu lieu dans le passé. Mais, c'est là le paradoxe, il a eu lieu sans trouver son lieu psychique, il n'est déposé nulle part (ce n'est pas un traumatisme, ce n'est pas un refoulement) »p11 préface JB Pontalis

Nous ne pouvons, en effet, que constater l'importance vitale de l'apport de l'environnement, particulièrement au tout début de la vie de l'individu; aussi bien avons-nous spécialement étudié l'apport positif de cet environnement en des termes qui se réfèrent à l'être humain et aussi à la croissance de l'homme, tant que la dépendance entre en jeu¹.

Certains individus peuvent mener une vie satisfaisante et même réaliser quelque chose d'exceptionnellement valable et pourtant être schizoïdes ou schizophrènes. Ils peuvent être tenus pour malades, au sens psychiatrique du terme, du fait de la faiblesse de leur sens de la réalité. Il en est d'autres, ne l'oubliions pas, qui sont si solidement ancrés dans la réalité objectivement perçue qu'ils sont malades, mais dans la direction opposée : ils ont perdu le contact avec le monde subjectif et se montrent incapables de toute approche créative de la réalité.p93

Les sujets schizoïdes ne sont pas satisfaits d'eux, mais les extravertis qui n'arrivent pas à entrer en contact avec le rêve ne le sont pas davantage. Ces deux groupes d'individus viennent nous demander une psychothérapie parce que, dans le premier cas, ils n'ont pas envie de passer leur vie sans établir un contact réel avec les choses de la vie et, dans l'autre cas, parce qu'ils se sentent irrémédiablement à distance du rêve. Ils ont le sentiment que quelque chose ne va pas, qu'il y a une dissociation dans leur personnalité. Ils désirent qu'on les aide à trouver leur unité ou encore à atteindre un état d'intégration spatio-temporelle où il existe vraiment un soi englobant tout, au lieu d'éléments dissociés et compartimentés ou comme dispersés et gisant épars.p94

La créativité :

(la créativité est la capacité à investir les objets)

La créativité est quelque chose d'universel. Elle est inhérente au fait de vivre. C'est elle qui permet à l'individu l'approche de la réalité extérieure

C'est en jouant et peut-être seulement en jouant, que l'enfant ou l'adulte est libre de se montrer créatif.p75

La psychothérapie s'effectue là où deux aires de jeu se chevauchent, celle du patient et celle du thérapeute. Si le thérapeute ne peut jouer, cela signifie qu'il n'est pas fait pour ce travail. Si le patient ne peut jouer, il faut faire quelque chose pour lui permettre d'avoir la capacité de jouer, après quoi la psychothérapie pourra commencer. Si le jeu est essentiel, c'est parce que c'est en jouant que le patient se montre créatif. p76

C'est en jouant, et seulement en jouant, que l'individu, enfant ou adulte, est capable d'être créatif et d'utiliser sa personnalité tout entière. C'est seulement en étant créatif que l'individu découvre le soi. De là, on peut conclure que c'est seulement en jouant que la communication est possible p76

La créativité est la coloration de toute attitude face à la réalité extérieure.
Il s'agit d'une mode créatif de perception qui donne à l'individu le sentiment que la vie vaut la peine d'être vécue

La capacité de créativité est directement liée à la quantité et à la qualité de l'apport offert par l'environnement lors des premières phases d'expérience de la vie que connaît tout bébé.p100

La créativité est l'un des dénominateurs communs à l'homme et à la femme. P101

La créativité chez l'individu est détruite par des facteurs de l'environnement intervenant tardivement dans la croissance personnelle (camps de concentration, persécutions..;) mais elle ne peut être totalement détruite. Il ne saurait vraisemblablement y avoir de destruction complète de la capacité de l'individu à vivre une vie créative; même, en cas de soumission extrême et d'établissement d'une fausse personnalité, il existe, cachée quelque part, une vie secrète qui est satisfaisante parce que créative ou propre à l'être humain dont il s'agit. Ce qu'elle a d'insatisfaisant est dû au fait qu'elle est cachée et, par conséquent, qu'elle ne s'enrichit pas au contact de l'expérience de la vie . J'irai jusqu'à dire que, dans les cas graves, tout ce qui est réel, important, personnel, original et créatif est caché et ne donne nul signe de vie (écoute tripolaire partie P3 de Lévine) p96

Attention : aborder la créativité en parlant de Léonard de Vinci...nous éloigne du thème qui est au centre de l'idée de créativité p97

Mode de relation à l'objet :

Quand nous nous montrons capables d'attendre, le patient parvient à comprendre d'une manière créative....Je pense que j'interprète surtout pour faire connaître au patient les limites de ma compréhension... P121

Pour Winnicott, l'objet devient réel parce qu'il est détruit (on passe de la relation à l'objet (relation projective (trouvé/créé)) à l'utilisation de l'objet)). La destruction joue son rôle en fabriquant la réalité, en plaçant l'objet en dehors de soi. La relation à l'objet peut porter sur un objet subjectif, l'utilisation de l'objet, elle, implique que l'objet fait partie de la réalité extérieure.

La démarche est la suivante :

- 1) le sujet se relie à l'objet.
- 2) L'objet est en train d'être trouvé au lieu d'être placé dans le monde par le sujet.

- 3) Le sujet détruit l'objet.
- 4) L'objet survit à la destruction.
- 5) Le sujet peut utiliser l'objet.

La séparation :

L'imago (représentation mentale de l'existence de la mère) chez le bébé dure un certain temps. Si l'absence de la maman dépasse ce temps, l'imago s'efface et le bébé perd la capacité d'utiliser le symbole d'union (objet transitionnel). Le retour rapide de la maman permet de calmer le désarroi du bébé. Mais si l'absence est trop longue (travaux de Bowbly), le traumatisme subi fait que le bébé a éprouvé une rupture dans la continuité de son existence (moment de folie) de sorte que les défenses primitives vont s'organiser de manière à protéger contre une répétition d'une "angoisse impensable" ou contre le retour de l'état confusionnel aigu qui accompagne la désintégration d'une structure naissante du moi. Le bébé repartira après guérison mais sera à jamais privé de la racine qui pourrait lui assurer une continuité avec le commencement personnel.

Notion d'espace potentiel :

Il existe une troisième aire, celle du jeu, qui s'étend jusqu'à la vie créatrice et à toute la vie culturelle de l'homme. Cette troisième aire est un espace potentiel opposé, d'une part, à la réalité psychique intérieure ou personnelle et, d'autre part, au monde existant dans lequel vit l'individu, monde qui peut être objectivement perçu. J'ai localisé cette aire importante d'expérience dans l'espace potentiel entre l'individu et l'environnement, cet espace qui, au départ, à la fois unit et sépare le bébé et la mère, quand l'amour de la mère qui se révèle et se manifeste par la communication d'un sentiment de sécurité donne, en fait, au bébé un sentiment de confiance dans le facteur de l'environnement.

L'espace potentiel entre le bébé et la mère, entre l'enfant et la famille, entre l'individu et la société ou le monde, dépend de l'expérience qui conduit à la confiance. On peut le considérer comme sacré pour l'individu dans la mesure où celui-ci fait, dans cet espace même, l'expérience de la vie créatrice. C'est là que se situe l'expérience culturelle. A l'opposé, l'exploitation de cette aire peut conduire à une condition pathologique où l'individu est littéralement encombré d'éléments persécutifs dont il n'arrive pas à se débarrasser. P143