GAMING FOR GOOD

A case study of how a computer game can empower players to become social innovators

By Mette Wichmand / August 2016

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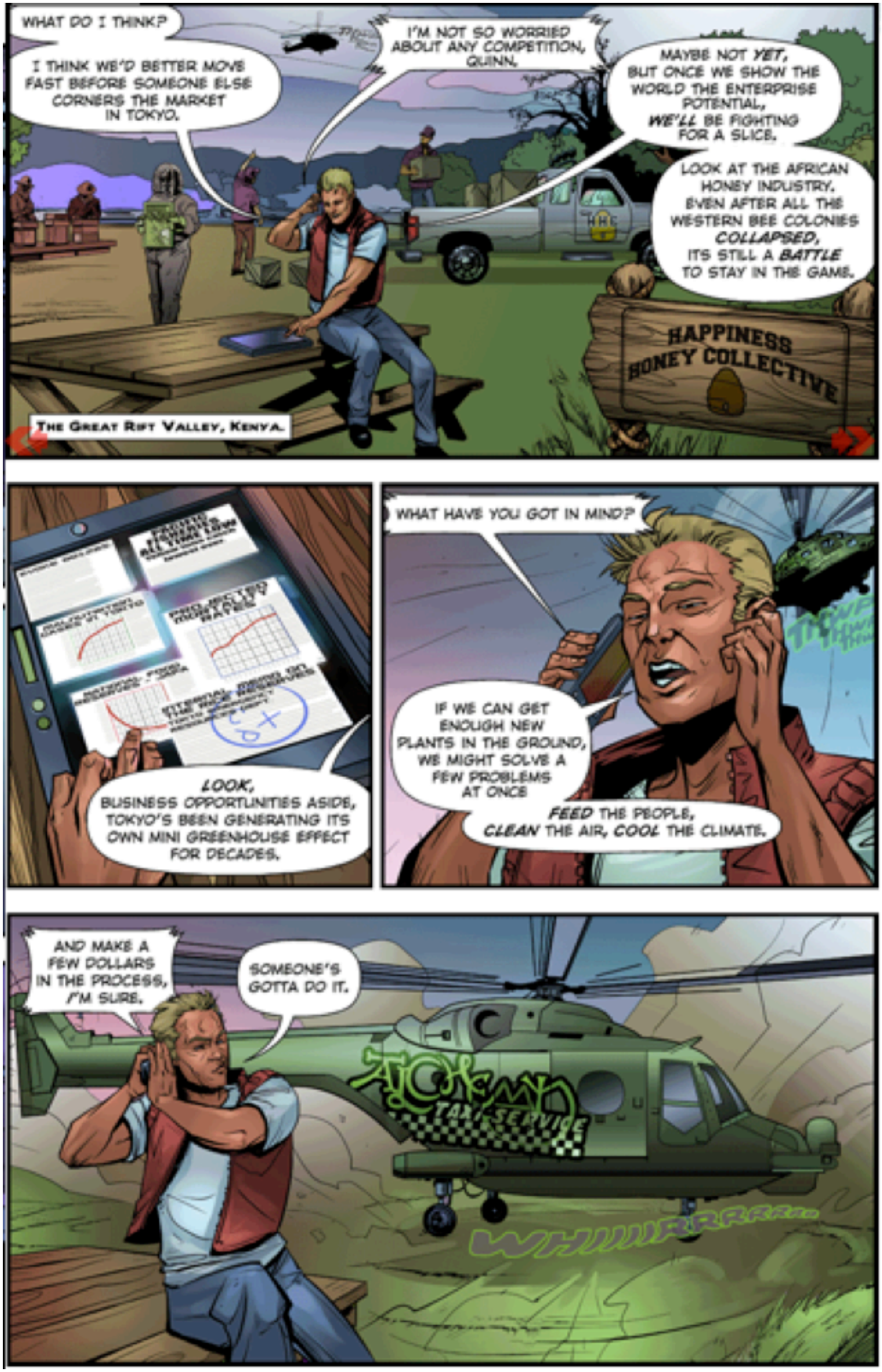
EVOKE
STARRING YOU!


TOKYO. FEBRUARY 13, 2020
YOU'RE CERTAIN THEY EXIST?
BECAUSE WE NEED REAL HELP, NOT FAIRY TALES. EVEN WITH THE RATIONING, WE'RE ONLY A MONTH AWAY FROM A FAMINE.
MR. GOVERNOR, IT'S NOT JUST US. OSAKA, KYOTO, TOO. EVERYONE IS DOWN TO THEIR FINAL MONTH OF RICE RESERVES.
I CANNOT LET THIS HAPPEN. I WILL NOT. NOT IN MY CITY.
IT'S SAID THE NETWORK WAS RESPONSIBLE FOR SAVING LAGOS AFTER THE MAIZE FAMINE OF 2017. BUT THEY'VE NEVER TAKEN CREDIT.
THEY NEVER DO.
SO, IF THEY'RE REAL, HOW DO WE GET IN TOUCH WITH THEM?
YOU HAVE TO SEND AN EVOKE, MR. GOVERNOR.
IT HAS TO COME FROM YOU.
SHOW ME.


THIS IS AN EVOKE FROM TOKYO
URGENTLY REQUIRE TACTICAL SOCIAL INNOVATION DEPLOYMENT.
CATEGORY: FOOD SECURITY.
DAKAR, SENEGAL
HELLO, TOKYO.
EVOKE MEMBER
CODENAME: EMBER.
EVOKE
ACTIVATE


UNIVERSITY OF LEGON, GHANA.
SO IF WE LOOK AT THE SOCIAL PROBLEMS CAUSED BY THE MASS MIGRATIONS OF 2016 –
BUZZ BUZZ BUZZ
EXCUSE ME, CLASS.
WE'LL PICK UP THIS DISCUSSION NEXT WEEK.
BUZZ BUZZ BUZZ
WHAT DO YOU BET SHE PULLS ANOTHER ONE OF HER DISAPPEARING ACTS?
THIS IS EMBER.
IT'S ALCHEMY. THERE'S A PROBLEM IN TOKYO. I'M SENDING YOU IN.
TOKYO?!!
HOW AM I SUPPOSED TO KEEP A LOW PROFILE IN TOKYO?!
I DON'T EXACTLY PASS FOR A HARAJUKU GIRL.
YOU'LL HAVE TO BE CREATIVE.
IS IT A FOOD SHORTAGE? CITIZEN X HAS BEEN POSTING LEAKED GOVERNMENT MEMOS ALL OVER THE WEB.
CITIZEN X IS AN IRRESPONSIBLE AND DANGEROUS ORGANIZATION,
I DON'T KNOW WHY YOU FOLLOW THEM.
BUT YES, IT'S A FOOD SHORTAGE. AND WE'RE GOING TO FIX IT.
I GUESS I'D BETTER TELL MY HUSBAND I'M GOING TO BE LATE FOR DINNER.


Bo-Kaap Quarter, Cape Town
IS IT JUST TOKYO, OR DO THEY WANT US TO HANDLE THE OTHER CITIES, TOO?
WE FIX TOKYO.
TOKYO WILL FIX THE REST.
HOW SOON CAN YOU LEAVE?
GIVE ME AN HOUR.
I JUST NEED TO PACK UP SOME TOOLS.
page 4 of 7


WHAT DO I THINK?
I THINK WE'D BETTER MOVE FAST BEFORE SOMEONE ELSE CORNERS THE MARKET IN TOKYO.
I'M NOT SO WORRIED ABOUT ANY COMPETITION, QUINN.
MAYBE NOT YET, BUT ONCE WE SHOW THE WORLD THE ENTERPRISE POTENTIAL, WE'LL BE FIGHTING FOR A SLICE.
LOOK AT THE AFRICAN HONEY INDUSTRY. EVEN AFTER ALL THE WESTERN BEE COLONIES COLLAPSED, ITS STILL A BATTLE TO STAY IN THE GAME.
HAPPINESS HONEY COLLECTIVE
THE GREAT RIFT VALLEY, KENYA.
LOOK, BUSINESS OPPORTUNITIES ASIDE, TOKYO'S BEEN GENERATING ITS OWN MINI GREENHOUSE EFFECT FOR DECADES.
WHAT HAVE YOU GOT IN MIND?
IF WE CAN GET ENOUGH NEW PLANTS IN THE GROUND, WE MIGHT SOLVE A FEW PROBLEMS AT ONCE
FEED THE PEOPLE, CLEAN THE AIR, COOL THE CLIMATE.
AND MAKE A FEW DOLLARS IN THE PROCESS, I'M SURE.
SOMEONE'S GOTTA DO IT.
TAXI SERVICE
WHUUURRRRR...


TOKYO. THE GOVERNOR'S OFFICE.
IT'S FOR YOU, SIR. IT'S *HIM*.
かかってきた電話
Incoming call
SO HE REALLY DOES EXIST.


MR. GOVERNOR, THIS IS ALCHEMY. YOU ARE *EVOKE* NUMBER 001285. ARE YOU AWARE OF HOW WE WORK?
I'VE ONLY HEARD THE SAME LEGENDS AS EVERYONE ELSE.
AND THAT'S WHAT YOU'LL KEEP TELLING PEOPLE.


OFFICIALLY, WE *DON'T* EXIST.
OUR SPECIALISTS WILL HANDLE YOUR FOOD SHORTAGE, BUT EVERYTHING IS *OFF THE BOOKS*.
YOU'LL QUIETLY FACILITATE LOCAL RESOURCES AND ACCESS TO PUBLIC LAND. *WE'LL* PROVIDE THE IMAGINATION.


WHEN WE'RE DONE, THE PEOPLE OF TOKYO WILL HAVE FRESH FRUITS AND VEGETABLES EVERY DAY OF THE YEAR.
WE KEEP A 50% SHARE IN THE PROFITS. YOU TAKE ALL THE CREDIT.
BY THE TIME WE LEAVE, TOKYO WILL HAVE THOUSANDS OF NEW FOOD SECURITY SPECIALISTS.
SO NEXT TIME, YOU WON'T HAVE TO SEND AN EVOKE.
WHEN DOES THE TEAM ARRIVE?
MR. GOVERNOR, WE DON'T WASTE TIME.
MY TEAM IS ALREADY THERE.
EVOKE
To Be Continued ...

The presumption of uniformity or homogeneity within global mediated culture is palpably absurd. It is a cacophonic space. […] Fractious, disputed, imperial, repressive, unjust, the global media space is nevertheless the place where any viable framework for the culture of globalization will need to be forged and where, if at all, an ethical and moral infrastructure for the future of civil society will emerge.

(Silverstone 2013 Kindle location 340 of 4848)

TABLE OF CONTENTS

PART TWO

Note: Anyone interested in seeing the entire empirical material – the spreadsheets containing all of the social network data and the transcribed interviews used in this thesis – are welcome to e-mail me at wichmand@ruc.dk.

A reader's guide

WHAT IS THIS THESIS ABOUT?

It [the computer game] was important, in the sense that it made me think more proactively about what's happening around me. It made me realize that I can't just be a spectator and I have a role to play in whatever way I can...it made me realize my role in the different problem areas in the world. It definitely did change me because now rather than just being aware of what is happening around me I've actually seen that I also have a responsibility to do something.... no matter how small it might start out.
— Player of the World Bank's online social innovation game, *Urgent Evoke*

The graphic novel presented in the beginning is the opening story of the Urgent Evoke game; the quote above stems from the empirical material of this thesis. The quote indicates that in the process of playing a game, a socio-political passive player can be transformed into a potentially active post-game citizen. This transformation process – seen as the interplay between the game design and the player's use and sense-making of the game – is the focus of this research project.

This project is an in-depth case study of the World Bank's online social network game Urgent Evoke1, which was developed in order to generate post-game player- driven social innovation by empowering players to:

> *investigate the most pressing challenges around the world, collaborate to generate innovative and creative solutions, and act to turn ideas into reality within their own communities and beyond.* (Gaible and Dabla 2010 : 9)

The primary research question of the project is: How did the interplay between the design of Urgent Evoke and the players' use and sense-making of the game create openings for an empowerment process that helped the winners become post-game social innovators?
In order to answer this question, different kinds of analyses are performed throughout the project. Some of these analyses are concerned with the intentions behind the game design and others with the players' use and sense-making of the game. Because of the differences in the analytical focus, the thesis has been divided in two parts.

Part I is dedicated to the intentions of the designers of *Urgent Evoke*.
Two different analyses of the design are performed. The first analysis, which is presented in Chapter 1, takes its point of departure from eight different game definitions and describes and discusses the elements they consist of. How these elements are present in the design of *Urgent Evoke* is also analysed. The aim of the chapter is to relate *Urgent Evoke* to a general theoretical discussion of what a

[1] A social network game is in this context an online game designed to be played by multiple players simultaneously and to facilitate the formation of a social network among the players.

game can be and at the same time point out what specifically characterises *Urgent Evoke*.
Chapter 2 analyses the game design, focusing on the interface of *Urgent Evoke* and the functionalities offered to the players. The aim of this chapter is to show how the design of the interface provides the players with different affordances that are intended to empower them.
The sub-question guiding the work in Part 1 of the thesis is: In what ways is the game design intended to empower players to become post-game social innovators?

Part 2 of the thesis focuses on the players' use and sense-making of the game. Chapters 3 and 4 present and discuss my theoretical and methodological framework. I introduce Activity Theory and Social Network Analysis as well as Brenda Derwin's 'Sense-Making Methodology' and Maria Barkadjieva's 'Methods of openings', which together form the theoretical and methodological lens of this thesis. I have chosen to place the introduction of the theories, the methodological assumptions and the methods applied in Part 2 of the thesis because I want the reader to have a better idea of the research object before entering into these more abstract and philosophical discussions.
The aim of Chapters 3 and 4 is to answer the following question: How does the cobbling of Activity Theory and Social Network Analysis anchored with the aid of Brenda Derwin's 'Sense-Making Methodology' and Maria Barkadjieva's 'Methods of Openings' contribute to our understanding of how a game design can generate openings for the empowerment of the players?
In Chapter 5, I analyse the players' use and experience of the game design and game play. This analysis looks at the players' use and sense-making of the game as a potential empowerment process. Analytically, this process is divided into three steps; each step is assigned its own section in the analysis.
The first section of this Chapter is concerned with Step 1, which is seen as the pre-game situation. In this section, I analyse what motivated the players to begin playing the game.
The second section discusses the in-game situation and what prompted the players to aim to win the game. The third section focuses on how the players' use and experience of the game enabled them to implement the ideas developed in the game in the physical world post-game.
An individual sub-question is attached to each of the three sections. The exact formulation of these sub-questions is presented in Part 2 of the thesis, after the theories, the methodology and the methods have been unfolded and the wording of the questions makes more sense.
A conclusion and discussion occur at the end of Part 2. In the conclusion the intentions presented in Part 1 will meet the realities described in Part 2 and a discussion of how the game could possibly be improved, and how the existing strengths can inspire future game designs is made.
Before entering into the analyses described above, which constitute my in-depth study of Urgent Evoke, I will in the following discuss where I position my thesis on the roadmap of academic discussions by explaining how the research I conducted is inscribed in an on-going discussion of social media and civic engagement. I also pinpoint how developments in the gaming industry have

made it relevant to research and discuss what games have to offer as a socio-political communication tool.

INTRODUCTION

As noted in the readers' guide above, this thesis is concerned with how a game can empower players to become social innovators. But because *Urgent Evoke* is a social network game, I argue that it belongs under the umbrella concept of social media and that the game's socio-political aim connects this thesis to a broader on-going scientific debate about social media and civic engagement. In this debate, 'believers' and 'sceptics' argue about the cultural, political and social changes that social media can engender. I position my own research in relation to this discussion and defend my own more pragmatic position within the discussion by highlighting the tensions between Habermas's and Foucault's philosophical starting points and by drawing inspiration from Maria Bakardjieva's concept of 'methods of openings'.

In addition to its being part of a new and evolving (social) media ecology, *Urgent Evoke* is also a state-of-the-art example of a merger between politics and play that has occurred in the last ten years. This merger is made possible because of different cultural, financial and political developments in and around the gaming industry[2]. These developments have led to the creation of a niche of serious games, popularly called 'games for change' (G4C)[3], that are intended to facilitate player-generated positive social change. These developments in and around the gaming industry are described in the second half of this Chapter.

Social media believers and sceptics

In the academic discussion of social media and civic engagement, the hope for a renewed civic engagement was sparked when the Internet began to find its way into private households in the 1990s. At that time, a 'first wave of enthusiasm for Internet-based visions of digital democracy' (Loader and Mercea 2012) swept among proponents of different models of democracy. What they saw in the Internet was a capacity for enabling communication, deliberation and dissemination of information that could bring about more direct, bottom-up or deliberative forms of democracy (Bakardjieva 2005, 2012; Dahlgren 2013). Playing a strong part in this optimism was the idea that the Internet forms a new type of digital 'Habermasian public sphere' (van Dijck 2011). The Internet was seen as a new frontier of untrodden land, where mankind is granted a second chance to create the ideal space for a public sphere to thrive. But research should soon show that typing an URL code does not cause us to turn away from our belief systems and points of view. To the contrary, we seem to bring our power relations, inequalities, preconceptions and other forms of human malware with us into cyberspace (Yee 2014). As a more nuanced and complex picture of the Internet's democratic capacity emerged, some of the initial enthusiasm surrounding the vision of the Internet as an agent of social change became more tempered (Carpentier et al. 2013).
But by the beginning of the new century, as the Internet evolved into a 2.0

[2] http://www19.iadb.org/intal/intalcdi/pe/2009/03785.pdf. Accessed 2nd of November,2016
[3] In 2004, the Games for Change (G4C) movement was formed by a group of non-profit directors, game developers, artists and academics committed to generating and promoting computer games that aimed at create positive social change.

version of itself and its social capacities were enhanced through what is popularly called social media, a second wave of democratic hope found its way into the popular as well as academic discourse framing the Internet (Loader and Mercea 2012). This time the focus was less on the possibility for creating a public sphere and more on how social media platforms like Facebook, Wikipedia and YouTube have created a new culture defined by open access and co-creation. This culture should transform a passive audience accustomed to simply consuming into an active group of people sharing knowledge, ideas and files in a collective process of producing common good(s).

Over the years, this participatory discourse has been fed by tales of how, for example, old dictatorial regimes tumble at the will of a youth powered by their Facebook network[4] or how unsolved scientific riddles are being cracked in a wink of an eye by a community of on-line gamers playing with the facts[5]. In this discourse, Internet users are portrayed as an army of not only co-creators and prod-users, but also as engaged citizens equipped with permanent Internet access via their smart phones, tablets and laptops and ever ready to contribute to the shared pool of collective intelligence with the ultimate goal of creating better services and products - or even a better world (Lévy & Bonomo1999; Benkler 2006; Leadbeater 2008, Shirkey 2008; McGonigal 2011; Jenkins 1992; Jenkins, Ford & Green 2013).

But the democratic and communitarian capacity ascribed to the Internet and in particular to social media in this second wave of enthusiasm has also been contested and criticised. For some, the idea that social media is a democratic tool that can give people a voice and help them communicate and deliberate about their ideas and opinions is naive and blind to the power at play. Part of this critique is concerned with how the Internet and social media influence what information we receive, how we process that information and in what ways we act on it. One concern is that because search engines such as Google base their search results on data from our previous searches, clicks and buys, they are likely to provide us with information that is in line with knowledge, ideas and opinions that we have already encountered, like and agree with (Pariser 2011). Further, scholars worry about that the Internet corrodes our ability to process longer forms of text, which makes it difficult to communicate about issues too complex to be explained in just 140 characters (Carr 2008, Wolf and Barzillai 2009) and that the Internet impels us to react to the information we receive online by liking and hearting, which generates a culture of 'clicktivism' that in most cases has no political impact other than keeping citizens from engaging in more profound ways. (Dean 2010)

In other words, all these critiques are concerned with how the Internet and social media influence our capacity to behave as informed citizens.
Another critique points out that most social media services are owned by organisations whose goal is to make a profit, not develop democratic engagement. So when we are granted the keys to the hallowed halls of YouTube,

[4] http://www.washington.edu/news/2011/09/12/new-study-quantifies-use-of-social-media-in-arab-spring/. Accessed 2nd of November, 2016
[5] http://en.wikipedia.org/wiki/Foldit. Accessed 2nd of November, 2016

Twitter and Facebook, we pay by delivering the content and by providing the owners of the digital tools that we use with valuable data about our private lives, preferences and personalities (van Dijck 2009, 2012 and 2013; Yee 2014). By agreeing to this bargain, users enter into an exchange relationship where they get caught in invisible algorithmic strings that turn them into labourers and commodities, not free democratic citizens (Fuchs 2014).

Connected to the critique of the financial workings of social media is the concern about the surveillance that the leaks made by Edward Snowdon have so conclusively revealed that takes place online. What this critique suggests is that as we become aware of what data we leave behind when we travel through cyberspace, who stores it, for what purpose and with whom they share it, we should probably not think of the Internet as a democratic space at all, but more as a digital panopticon were the most sound reaction would probably be to be paranoid instead of enthusiastic on behalf of democracy, as we are all – possibly permanently – being watched by commercial and political actors (Dean 2010).

What has been sketched above is not the complete history of the academic discussions about the Internet, social media and civic engagement. It is an outline intended to demonstrate that the Internet, as other technologies before it, has brought about proponents and opponents, optimists and pessimists. And even though it is possible to find all of the individual viewpoints valid, the greatest contribution of the involved researchers may lie in the complex multifaceted picture of the relationship between the Internet, social media and civic engagement that they draw together. Collectively, these contributions tell us that the Internet and social media are not exclusively good or bad, emancipatory or repressive, democratic or not. Instead, what we see depicted is a conglomerate of communicative spaces that moves the line between what we have seen as private, public and corporate, (van Dijck 2012 and 2013) creating new possibilities and barriers for interaction, political deliberation and social change.

But how does one deal with and orient oneself in a field where the analytical object is highly complex and still evolving, and where research is contradictory? To position myself in this debate, I have found it helpful to look at the literature as a representation of a tension between the normative and the real, between what could be and what actually is. This is a tension that Bent Flyvbjerg calls 'crucial to understanding modern democracy', which he describes by contrasting the central ideas of Habermas and Foucault (Flyvbjerg 1998). In the following, I describe this tension as Flyvbjerg sees it and explore why I, as a communications researcher, find the tension described to be a constructive framework for engaging with, analysing and discussing the connection between social media and civic engagement.

A tension between what could be and what actually is

At this point, I bring Habermas and Foucault into the discussion because they help me position myself in the debate sketched above and explain the aim of this thesis.

Both Habermas and Foucault are political thinkers concerned with how citizens can become empowered and gain the freedom that allows them to participate in political life. However, these scholars have differing ideas about how to achieve that empowerment. Flyvbjerg (1998) writes,

> *Both thinkers see the regulation of actual relations of dominance as crucial, but whereas Habermas approaches regulation from a universalistic theory of discourse, Foucault seeks out a genealogical understanding of actual power relations in specific contexts.* (Flyvbjerg 1998: 223)

In laying out two very different pads that should lead to human freedom, the two scholars also mark two very different positions for research – one is normative and the other descriptive.

I do not conduct a thorough review of the two thinkers' theories and their development over the years. My aim is to use Flyvbjerg's description of the tension between their ways of thinking about research and civic engagement in order to suggest a way one can orient oneself in the complex discussions about the Internet, social media and civic engagement.

One of Habermas's central concepts is the public sphere, which is a counterpart to the private and political spheres, where ordinary citizens can engage in political deliberations for the purpose of developing the best argument and reaching a consensus. This deliberative process should be guided by normative discourse ethics that bracket all social, cultural and economic inequalities and enable citizens to communicate as equals. The existence of a public sphere that is shielded from state, church or market forces is guaranteed by constitutions and social structures that are produced and implemented from the top-down. According to Habermas, his concept of a public sphere has never been fully implemented anywhere (Fraser 1990), but functions as a normative ideal of what could be.

For Foucault, the idea that constitutions and social systems can guarantee any kind of freedom is dangerously naïve:

> *On the contrary, history has demonstrated – says Foucault – horrifying examples that it is precisely those social systems which have turned freedom into theoretical formulas and treated practice as social engineering, i.e., as an epistemically derived techne, that become most repressive.* (Flyvbjerg 1998: 222–223)

In Foucault's view, it is impossible to imagine a social space where everyone is equal. Power will always be present; it cannot be bracketed or disarmed by the writing of national constitutions. Reaching a consensus can never be seen as the result of the identification of the 'best argument', but must be understood as an

expression of one argument winning while others have been repressed.
For Foucault, the only way to approach a situation where citizens can be free and have the opportunity to influence the political process is by making historical, contextual analyses that reveal the power at play in specific situations and thereby enable the repressed to resist and struggle. In Foucault's understanding, struggle and conflict is an inevitable part of public life and is an integral part of what it means to be civically engaged:

> *In a Foucauldian interpretation, suppressing conflict is suppressing freedom, because the privilege to engage in conflict is part of freedom.* (Flyvbjerg 1998: 229)

Thus, it can be argued that while Habermas is universalistic, normative and consensus-seeking and points to what could be, Foucault is contextual, descriptive and conflict-oriented and interested in what actually is.

Flyvbjerg uses his comparative analysis to conclude that Foucault's theoretical perspective is a better choice than that of Habermas when one wants to understand democracy, strengthen civil society and bring about social change (Flyvbjerg 1998: 230). But I claim that dealing with concepts such as democracy, civil engagement and social change in the context of the Internet and social media is difficult if one is 'only' analytical and contextual and never idealistic and normative.

From the Foucauldian perspective, the job of a communication researcher includes making individual contextual analysis of different social media platforms with the purpose of revealing how these different designs generate certain power structures and conflicts. I agree with this perspective, and find the critical contextual approach to communication research very relevant and important.

But at the same time, I also think that communication research loses some of its potential if we researchers never dare to use our results to get involved with the actual design of social media and bring with us a normative purpose of strengthening civil society and bringing about social change. My suggestion is therefore to hold on to both Foucault's and Habermas's ontological points of departure and strive for a continuous movement between the two poles – between the ideal and the contextual and the normative and descriptive. In this way we can analyse the political and social changes that social media actually bring about and also aim to achieve the approximation of a Habermasian public sphere through the continuous (re-)design of social media platforms.

From this dialectical and iterative understanding of communication research and of the connection between the Internet, social media and civic engagement, the complexity and pluralism recognised in the literature presented in the beginning of this introduction is not something that can be 'fixed' by finding THE right answer to whether social media strengthen civic engagement or not. Instead of trying to find one general answer, I follow in the footsteps of Maria Bakardjieva, who talks about a 'method of openings' as one possible approach to research on

social media, where the focus is on finding the openings that can help us understand when social media do bring about civic engagement and citizen-driven social change. She writes:

> *I set out to investigate what it is possible to achieve with new media in the terrain of citizenship rather than to present a statistically measured account of what is real. Elsewhere I have referred to this approach as the 'method of openings'. Through this method I will inquire into the circumstances of actual civic engagement facilitated by new media and what can be learned from them.* (Bakardjieva 2012: 1357)

It is from a similar positive approach that I set out to investigate what is possible to achieve with a G4C social network game in the terrain of citizen-driven social innovation using *Urgent Evoke* as a single state-of-the-art case.

I return to a discussion of Bakardjieva's 'method of openings' in the methodology and theoretical framework section of this thesis. The following section tells the story of the financial, cultural and political changes in and around the gaming industry that have led to and enabled the merger between games and politics. This section draws primarily on data from the gaming industry and on studies of the history of digital games.

From Spacewar! to Urgent Evoke

The history of computer games often takes *Spacewar!* as its point of departure. *Spacewar!* was one of the earliest computer games developed. The reason that the backstory of this game is often repeated is probably that it resembles the tale of the Ugly Duckling, i.e., the story of an inferior, ridiculed and underestimated protagonist who grows up to become an admired and appreciated creature. *Spacewar!* was conceived in 1962 in the labs of the Electrical Engineering Department at the Massachusetts Institute of Technology (MIT) (Brand 1972). The game is a graphically simple (see screen dump below) two-person shooter game that puts the player on the mission of controlling a spaceship and shooting down the other player while avoiding the gravitational pull of the sun.

Figure 1: Screen dump of Spacewar! retrieved from en.wikipedia.org/wiki/Spacewar! (video_game) 8 July 2016.

The game was developed by a group of MIT students, who were all members of 'The Tech Model Railroad Club'. Besides their keen interest in constructing and playing with model trains, many of the students were also great fans of sci-fi

literature. When it was announced that a PDP-1 computer would be donated to MIT by the Digital Equipment Corporation (DEC), the students soon began to brainstorm how to display the potential of the computer's unique cathode ray tube graphic display in an interesting way. *Spacewar!* was their answer.
The researchers and teachers at the MIT were not amused. They saw the game as a misuse of the computer's power, labelled its invitation to play as student prank and tried to delete the game from the computer. Despite these attempts to stop the students' playful approach to the new technology, the game became a success. First, MIT students started to spend their nights in the lab playing the game. Later, copies spread to other PDP-1 users and even to users of other computers, who modified the game to their machines. Finally, DEC decided to use the game to display the capacity of their technology to potential customers and proceeded to sell the computer with a copy of the game (Donovan 2010).
Today, computer games can no longer be written off as student pranks: the medium is the core of a million-dollar industry generating twice the revenue of the music industry[6]. And despite the fact that computer games are still often framed by a discourse depicting the medium as a generator of aggression, violence and social deviation[7], the industry after nearly 40 years has also won the cultural recognition of powerful actors like the U.S. Supreme Court, who in a 2011 opinion said:

> *Like the protected books, plays, and movies that preceded them, video games communicate ideas – and even social messages – through many familiar literary devices (such as characters, dialogue, plot, and music) and through features distinctive to the medium (such as the player's interaction with the virtual world*). (Brown, Governor of California, et al. V. Entertainment Merchants Association et al., Supreme Court of the United States, June 27, 2011)

The reason computer games have become a strong industry and have managed to win a spot among older and more established cultural forms of expression is probably due to the medium's capacity to win the hearts and attention of a number of demographic groups and the game designers' ability to keep evolving and expanding their repertoire. Today, the average gamer is 30 years old and has about 13 years, or 10,000 hours of game experience[8]; 45% of all players are women and 25% are over 50 years old[9]. The international community of gamers spends 3 billion hours a week playing games[10].

Modern games are designed to offer anything from a graphically simple 2D

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[6] http://www.economist.com/node/21541409.
[7] http://time.com/34075/how-violent-video-games-change-kids-attitudes-about-aggression/, http://www.theguardian.com/science/brain-flapping/2013/sep/20/video-games-cause-violence-claims-cause-violence and http://www.cbsnews.com/news/violent-video-games-and-mass-violence-a-complex-link/. All accessed 2nd of November, 2016
[8] 10,000 hours are equivalent to the number of lessons a Danish child will receive through ten years of public school. The number also corresponds to the number of hours that it is believed it takes to become an expert practicioner of something.
[9] Entertainment Software Association: http://www.theesa.com/wp-content/uploads/2014/10/ESA_2013_Annual_Report.pdf. Accessed 2nd of November, 2016
[10] https://www.ted.com/talks/jane_mcgonigal_gaming_can_make_a_better_world?language=da. Accessed 2nd of November, 2016

experience to an immersive journey into a visually rich 3D environment. There are games that can be played alone, with a friend or two or even with a massive number of total strangers. They can be played on laptops, tablets or mobile phones, at home or on the move. Some games take 30 seconds; others tell epic stories and can be played for years in a row. And even though the greatest number of games produced today are commercial entertainment titles such as *World of Warcraft*, *Grand Theft Auto* and *The Sims*, the number of non-commercial serious games[11] is growing (Neys and Jansz 2010; Breur and Bente 2010). Although serious games today are played in a variety of organisational contexts, such as health and education as well as corporate environments, in order to train and inform patients, students and employees, serious games are also slowly finding their way into private homes in many different forms, as newspapers, NGOs, research institutions and the like have begun to use games as a medium to engage the public in different social and political issues (Breur and Bente 2010; Neyz and Jansz 2010).

One example of this is *Darfur is Dying*[12], an online video game funded by MTV, Reebok Human Rights Foundation and the International Crisis Group. The game is designed to raise awareness about and help players take action in relation to the on-going war taking place in the Darfur region of Sudan. Because *Darfur is Dying* is designed to facilitate an active player response to the problems presented in the game in a fast and easy way, several possible post-game actions are embedded into the game. Such responses include a direct link to donate money to humanitarian organisations working in the area or an automated petition that can be send to the US Congress to urge the passage of legislation that would assist Darfur's refugees.

Taken together, the developments in and around the gaming industry described above – the financial consolidation of the industry, the expansion of the means of expression, the cultural recognition, the demographic diversification of the user group, the broadening of user contexts and the upsurge of serious content and above all, the entry of serious games into private households, have made it possible to see games not only as an entertainment medium but also as possible social-political communication tool (Neys and Jansz 2010). It is in this development that *Urgent Evoke* and this thesis have their roots.

It is not only serious, it is political

While the gaming industry has been busy growing, consolidating and diversifying, the world around the industry has not stood still either. Today, globalisation is making the world a more intertwined and complex place where not only trade is crossing borders, but also refugees, Ebola and climate change. These challenges are forcing the international community to look for technologies that can help them mitigate these wicked problems. In 2008, when the financial crisis hit the euro zone as well as the U.S economy, and as public

[11] Serious games' is not a game genre, but a category of games that does not have amusement as their primary goal. Some of the first serious games were create for the US Army as training tools, making it possible to train for battle situations and think through different strategic scenarios (*The Economist* 2014).
[12] http://www.darfurisdying.com. Accessed 2nd of November, 2016

money began to become scarcer, many public actors were forced to look for new resources in order to be able to deal with the challenges. One possible resource that could be tapped was the human capital of citizens. This increasing political interest in engaging citizens in socio-political development is reflected in a report from the Organisation for Economic Co-operation and Development (OECD):

> *Governments alone cannot deal with complex global and domestic challenges, such as climate change or soaring obesity levels. They face hard trade-offs, such as responding to rising demands for better quality public services despite tight budgets. They need to work with their own citizens and other stakeholders to find solutions.* ('Focus on Citizens Public Engagement for Better Policy and Services', OECD 2009: 13)

What the OECD is underlining is that it is not just warm hands that are needed to help perform public chores, but creative and entrepreneurial minds that can come up with innovative solutions to current public problems. In other words, what is sought are ways to turn passive citizens into creative and innovative social change agents willing to create and implement social innovations that can help solve wicked public problems. As indicated above, the gaming industry might hold a possible answer to the call.

Among the designers of serious games, a small but growing movement called 'Games for Change' (G4C) has existed since 2004[13]. What separates G4C games from other serious games are their focus on socio-political issues and their attempt to create a bridge between the game play and the physical world, which argues that games, besides entertaining, teaching and informing the public, can actively engage players in creating positive social change. The G4C game developers reason that some of the three billion hours people spend playing games weekly could be translated into player-driven social innovation. In other words, games can be developed that challenge players to develop 'social innovation super powers' and fight complex social challenges such as poverty and human trafficking, rather than raid virtual worlds and fight digital monsters.

But even though the idea of combining the need for civic engagement with playing games can seem counterintuitive, a growing body of research seems to back the idea. Years of research has focused primarily on the negative outcomes of playing computer games such as anti-social behavior, aggression and violence (Grüsser, Thalemann and Griffiths 2007; Sherry 2001). However, an increasing amount of research is beginning to demonstrate the positive impact that games might have in relation to health and education, for example, thus creating a more nuanced picture of the medium's strengths and weaknesses. Researchers have also begun to pay attention to the impact that video games might have on civic engagement (Bers 2010), demonstrating that playing video games can cause players to engage in off-line activities that previous research has found to promote good civic outcomes (Adler and Goggin 2005).

[13] http://www.gamesforchange.org. Accessed 2nd of November, 2016

These activities include helping and guiding others, learning about problems in society, exploring social, moral or ethical issues, organising interest groups, discussing social and political issues with family and friends, raising money for charity and writing letters to elected representatives in the off-line world (Lenhart et al. 2008; Bers 2010; Neys and Jansz 2010). Research has also shown that pro-social game play increases post-game pro-social behaviour (Gentile et al. 2009), that games promote online and off-line social support among players (Trepte, Reinecke and Juechems 2012) and that games have the capacity to function as a new form of a 'third place' for political deliberation (Steinkuehler and Williams 2006) – or as a 'public sphere', as Habermas would put it.

But even though these findings substantiate the G4C developers' participatory optimism, very little research has been conducted to date on the workings and effects of G4C specifically (Connolly et al. 2012). It is this opening in the research literature on games that this thesis takes as its raison d'être.

Formulating the research question

In my eyes, the scientific debate about the democratic impact of social media, the need for civic engagement and the socio-political aim of the G4C movement introduced above come together in *Urgent Evoke*. I recognise in the game's design an intention to use the social potential of the game to create an opening, as Maria Bakardjieva defines it, for civic engagement and citizen-driven social innovation. And, as the statement by the *Urgent Evoke* player quoted at the beginning of this thesis indicates, there is good reason to believe that the game – at least to some degree – succeeds in creating such an opening. I have therefor chosen to use *Urgent Evoke* as my case (This choice is explained more thoroughly in Chapter 3). My aim is to describe and understand how *Urgent Evoke* succeeds and my research question is:

How did the interplay between the design of *Urgent Evoke* and the players' use and sense-making of the game create openings for an empowerment process that helped the winners become post-game social innovators?

Concept clarification

The following discussion clarifies my understanding and use of both social innovator and empowerment:

Social innovator

While there are many ideas about what defines a social innovation and a social innovator, two of these definitions are particularly relevant to this thesis.
One definition is represented in the work of The Young Foundation, which is a London- based think tank founded in 1954 and devoted to social innovation[14].
The foundation's website states, 'We define social innovations as new ideas (products, services and models) that simultaneously meet social needs (more effectively than alternatives) and create new social relationships or

[14] http://youngfoundation.org/about-us/history/. Accessed 2nd of November, 2016

collaborations'[15]

In this definition, social innovation is an answer to a social need that also creates new social relationships. The definition is very neutral about where the innovation comes from and what the result of the new relationships would be. By comparison, Frances Westley, who holds the JW McConnell Chair in Social Innovation at the University of Waterloo in Canada, introduces a different way to define social innovation: 'Social innovation is an initiative, product or process or program that profoundly changes the basic routines, resource and authority flows or beliefs of any social system'[16]. This definition is very different from that of the Young Foundation: it does not focus on finding an answer to a specific need, but is more concerned with changing the structures of the social system and the distribution of resources (e.g., money, social and cultural capital). In Westley's version, it does not count as a social innovation to meet a social need if the structures creating the need are not changed as well.

When comparing the differences between these two definitions of social innovation, it is clear that these variations will also lead to different understandings of what defines a social innovator. In the Young Foundation's definition, while a social innovator is capable of producing innovative solutions to social problems, she should also be able to forge new social relationships and collaborations in the innovation process. Westley's definition of social innovation calls for a person with a more political capacity and a power to change the way different resources are distributed.

When compared to these definitions of social innovation and their implications for what it means to be a social innovator, the World Bank's own definition of the concept seems very pragmatic:

> *Social innovation, for the purposes of this evaluation, is considered to be the development of new forms of action, organization, transaction or other social interaction that meet existing and emerging social needs.* (Gaible and Dabla 2010: 9)

Later on, the same text clarifies what is meant by 'new' in the following way:

> *Although our working definition of social innovation involves the development of new forms of activity – and was framed originally by Peter Drucker and other economists in discussions and publications in the 1970s and 1980s – our evaluation does not anticipate that players will (necessarily) develop activities that are "globally new". Instead, our evaluation focuses on players' experiences, and encompasses forms of "the new" that are new to them and new to their communities.* (Gaible and Dabla 2010: 9)

The World Bank boils down the definition of a social innovation to an activity that meets a social need. Their definition makes no mention of new social relationships or a redistribution of resources. When their definition is translated

[15] http://www.youngfoundation.org/our-work/social-innovation. Accessed 2nd of November, 2016
[16] http://sig.uwaterloo.ca/highlight/the-social-innovation-dynamic. Accessed 2nd of November, 2016

into what it takes to be a social innovator, we end up with a person capable of creating or identifying new activities that could meet a social need and of implementing these activities in their community. But in its definition of the aim of *Urgent Evoke,* the World Bank becomes a bit more specific in their definition of a social innovator:

> *[…] Evoke's aim is to empower players to: investigate the most pressing challenges around the world collaborate, to generate innovative and creative solutions and act to turn ideas into reality within their own communities and beyond.* (Gaible and Dabla 2010: 9).

Note that I have emphasised in the quote the activities that the game should empower the player to be able to perform, i.e., investigate, collaborate, generate innovative and creative solutions and turn ideas into reality.

I am fascinated by Westley's more political understanding of social innovation and what it means to be a social innovator because it assumes that no real social change is created without dealing with the power structures that create the social needs. However, for the purposes of this thesis, I apply the World Bank's definition of a social innovation as an activity that meets a social need.

Empowerment

Empowerment is the other central concept in need of clarification. Empowerment, like social innovation, has many different definitions (Rowlands 1995; Perkins and Zimmerman 1995). I use the term because it is part of the World Bank's own formulation of their aim with *Urgent Evoke*, but also because I have a long-held professional interest in finding and developing spaces (physical and digital) where people can learn to communicate their socio-political hopes, dreams and ideas and how to turn those ideas into reality and thereby influence their own living conditions in a positive way. Such a learning process could also be defined as a process of democratic empowerment (Nielsen 1998).

In this case, there is a close connection between social innovation and empowerment, as the World Bank defines empowerment in relation to providing players with the capacity to investigate, collaborate, generate innovative and creative solutions and turn their ideas into reality. In this context, the World Bank does not show any interest in changing the power structures in society with *Urgent Evoke*. What it does aim to do is provide individual citizens with the resources needed to develop social innovative ideas that can generate positive social change in the form of economic development and relief. But even though the World Bank refrains from formulating a political project, I do see a political element in the game: if the players become empowered to generate social innovative ideas, they have the potential to be empowered to influence the social and political conditions that frame their lives as well.

An often-mentioned distinction in the literature on empowerment is the distinction between empowerment as a process and as an outcome (Perkins and Zimmerman 1995). In relation to *Urgent Evoke*, empowerment is defined as both a process and an outcome. The players need to go through the process of playing the game and thereby become empowered. But the process is also expected to

result in a number of socially innovative ideas and players capable of implementing them. In my approach to analysing *Urgent Evoke*, I also think of empowerment as both a process and an outcome, as I am interested in the 'end result' – can the game empower players to become social innovators? – as well as in what happens in the process that leads to the final outcome.

While I do not operate with a readily defined concept of empowerment in this project, I have above all tried to describe why I think it is fair to term the process of playing *Urgent Evoke* as a process of empowerment. To put it simply, I think of empowerment in relation to *Urgent Evoke* as a learning process where ordinary citizens develop the competence and courage needed for them to access the game and start to develop and communicate their socio-political hopes, dreams and ideas. They then take those ideas with them into the physical world and manage to influence the social and political conditions framing their lives by implementing them.

PART ONE

Chapter 1
WHAT IS A GAME?

In the Introduction, I placed *Urgent Evoke* as an on-line social network game under the umbrella of Social Media. After having positioned *Urgent Evoke* on the larger map of the media landscape, I zoomed in on the evolutionary timeline of game design and categorised *Urgent Evoke* as belonging to the one of the latest 'off-spring' of Games4Change, a socio-political sub-genre of serious games.
My goal has been to position *Urgent Evoke* in relation to other forms of media and define its position in the history of games. But what still needs to be done is to outline what makes *Urgent Evoke* a game. This first chapter in Part 1 is devoted to discuss what a game is – or rather what it can be.
Defining a game is a complex task. A lot of different definitions have been contemplated over the years by different authors. However, although most of the definitions have elements in common, they vary widely. Taken collectively, these definitions generate a multifaceted idea of what a game is and can be.
Seen historically, it is no wonder that this diversity of definitions has emerged. In 1938, when Huizinga wrote *Homo Ludens*, there were no computer games and games in general had certainly not yet pervaded human life to the extent they have today. But the variety in definitions is not only a result of the technological and cultural development that has taken place since Huizinga. It is also a result of the variety in the backgrounds of the people thinking and writing about games. For example, Huizinga was a historian and cultural theorist, Bernard Suits a philosopher and Greg Costikyan a game designer and writer, to mention a few. This variety of definitions should be treasured, and attempts to narrow the field of game definitions down to a 'one-size-fits-all' should be avoided. This means that I allow the diversity to flourish and refrain from defining *Urgent Evoke* as 'just" a game. Instead, I draw on Salen's and Zimmerman's chart of 15 game elements extracted from eight central definitions in order to discuss these elements theoretically and in which way they play a role in characterising *Urgent Evoke* as a game. But before I start the discussion of the 15 elements, I create a short description of *Urgent Evoke*, which is necessary for understanding the following discussions and analyses of the game.
At this point, a description of *Urgent Evoke* game is in order, after which I apply theoretical discussions of game elements and how they characterise this specific game.

Urgent Evoke

Urgent Evoke (*UE*) is an online, social network game[17] that is free to play via a computer, tablet or smart phone. The game was developed by the World Bank Institute in cooperation with the game designer, Jane McGonigal. As noted earlier, the aim of the game is to generate post-game player-driven social innovation.
The game is open to players of all ages and can be played from anywhere in the

[17] Being a social network game means that the game concentrates the players' engagement simultaneously on one platform and that the game is designed to instigate collaboration between players.

world (although the recommended minimum age is 13 and young people from South Africa and to some extent other Sub-Saharan countries in particular were targeted initially). *UE* was played for the first time in 2010 from March 3 until May 12 for a ten-week period. It is this version of the game that is analysed in this thesis. Later, a Spanish re-designed version of the game was played in 2012. Today, the original game can be found on-line where it is open to high school teachers as an educational tool.

Urgent Evoke revolves around a narrative told in the form of a graphic novel. Every week a new chapter is released. The narrative driving the game is the story of a secret network of international agents with innovative superpowers capable of solving some of the most wicked problems the international community faces (hunger, armed conflicts, environmental challenges, etc.). A player acts as an agent in the network. With each chapter, players are given a new mission and quest. The missions are connected to the wicked problems presented in the 10 chapters of the graphic novel. The quests are formulated to help players reflect upon and strengthen their personal capacity as a social innovator.

To win the game, players must complete the 10 missions and 10 quests and turn in an Evokation. An Evokation is a detailed and innovative plan of how the player will tackle a self-chosen challenge in the physical world after the game has ended. A team formed by the World Bank evaluates the Evokations and the plans found most promising are rewarded with a mix of seed-money, mentorships by respected social innovators, entrepreneurs and international development professionals, and an opportunity for the winners to attract crowd funding via the Global Giving Challenge (www.globalgiving.org/evoke. Accessed the 2nd of November, 2016). A subset of winners are also invited to an EVOKE summit held in Washington DC post-game.

Next to the winners, players who complete all ten missions and quests are recognised for their engagement and receive World Bank Institute certificates stating that they are certified social innovators. Their names are mentioned on the *UE* website as 'Certified EVOKE Social Innovators – Class of 2010'. Players who complete one or more missions and quests are recognised on the *UE* website as members of 'the EVOKE class of 2010 graduates'.

Next to the players, 11 game runners are allocated to the game. Their job is to secure the game runs smoothly by greeting new players, answering questions, providing feedback and assigning points to the players and facilitating interaction and discussion among players (Gaible and Dabla 2010: 10). Furthermore, *Urgent Evoke*'s executive producer Robert Hawkins (Senior Education Specialist in the World Bank), Jane McGonigal (Chief designer of *Urgent Evoke*) and several others game developers also participate in the game with a player profile.

During its initial ten-week run-time in 2010, Urgent Evoke caught an unprecedented public attention as a serious game. An evaluation of this initial game (Gaible and Dabla 2010: 5) states that:

171,958 different individuals made 286,219 visits to the game;
19,386 people registered as players;
6,618 people completed at least one mission or quest;
142 players completed all ten missions and quests;
73 people submitted Evokations; and
32 Evokations were awarded by the World Bank.

In addition to the 19,386 people who registered as players, about 80,000 people were 'repeat visitors' who came back to the site several times to read the graphic novel, blog posts and linked web resources, and to view photos and videos. The players represented 150 different countries, although the majority originated from North America and Europe (Gaible and Dabla: 16).

I now discuss 15 elements that can constitute a game and how the combination of these elements characterises *Urgent Evoke* as a game.

One definition or a mix of characteristics?

When reading the research literature on games, one quickly discovers that there is no clear definition of what a game is. Instead, many definitions overlap each other in different ways. In *Rules of Play* (2004), Salen and Zimmerman's extensive and fundamental book about games and game design, the authors created a chart summarising the elements of eight different game definitions formulated by well-known game theorists.

	Parlett	Abt	Huizinga	Caillois	Suits	Crawford	Costikyan	Avedon/ Sutton-Smith
Proceeds according to rules that limit players	√	√	√	√	√	√		√
Conflict or contest	√					√		√
Goal- & Outcome-oriented	√	√			√		√	√
Activity, process or event		√			√			√
Involves decision making		√				√	√	
Not serious and absorbing			√					
Never associated with materialgain			√	√				

	Parlett	Abt	Huizinga	Caillois	Suits	Crawford	Costikyan	Avedon / Sutton-Smith
Artificial/Safe/ Outside ordinary life			√	√		√		
Creates special social groups			√					
Voluntary				√	√			√
Uncertain				√				
Make-believe/ Representational				√		√		
Inefficient					√			
System of parts/ Resources and tokens						√	√	
A form of art							√	

Figur 2: Reproduction of Salen and Zimmerman's game definition chart. Salen and Zimmerman 2004: 79

Salen's and Zimmerman's chart does not cover all existing game definitions, but it visualises clearly the breadth and diversity of the field of game theory. This diversity could be seen as a challenge for the community of game researchers and Salen and Zimmerman are struggling to provide an answer to how to deal with it. On one hand, they argue that it is important to begin to formalise the relatively young field of game research by creating one 'universal' definition of the core object. On the other hand, they find that defining a complex phenomenon like games is problematic, a situation they describe in the following way:

> *Sometimes the answer to the question of whether or not a game is a game rests in the eye of the beholder. Any definition of a phenomena as complex as games is going to encounter instances where the application of the definition is somewhat fuzzy. Rather than seeing these moments as a breakdown of the definition, we view them as valuable opportunities to understand games as a whole. The terrain along the borders of the more rigid definitions offers fertile ground for insight and investigation. In these playful and liminal spaces, assumptions are challenged, ideas evolve, and definitions change.* (Salen and Zimmerman 2004: 82)

I do not agree with Salen and Zimmerman that a universal game definition should be created for the exact reason they state themselves in the quote above: it would cripple our opportunity to understand games as a whole. Instead of seeing the diversity represented in their chart as an invitation to discuss which definition is the right definition, I find it much more interesting to look at the

grid as an acknowledgement of the on-going creative, technological and cultural developments taking place in and around games that have kept and still keep pushing our understanding of what a game is and could be. I find a lot of inspiration in Wittgenstein when he rejects our search for generality or an essential core in one word or concept and suggests instead that we allow ourselves as researchers to sometimes operate inside networks of similarities, relations and resemblances:

> *Consider for example the proceedings that we call 'games'. I mean board-games, card-games, ball-games, Olympic games, and so on. What is common to them all? — Don't say: 'There must be something common, or they would not be called 'games' —but look and see whether there is anything common to all. — For if you look at them you will not see something that is common to all, but similarities, relationships, and a whole series of them at that. […] And the result of this examination is: we see a complicated network of similarities overlapping and criss-crossing: sometimes overall similarities, sometimes similarities of detail. […] I can think of no better expression to characterize these similarities than 'family resemblances'; for the various resemblances between members of a family: build, features, colour of eyes, gait, temperament, etc. etc. overlap and criss-cross in the same way.— And I shall say: 'games' form a family.* (Wittgenstein 1953: 66–67)

The consequence of what Wittgenstein says, of course, is that it becomes difficult for researchers to talk about games in general and compare findings because without a shared clear definition, how do we know that we are talking about the same thing? The only way to establish the 'family resemblance' is to reveal the 'genetic code' of every game (to stay in Wittgenstein's metaphor). In order to reveal the 'genetic code', we must develop a genetic alphabet. I see in Salen's and Zimmerman's chart the potential for such an alphabet as the elements in the chart stem from eight definitions made by nine well-established and recognised game researchers. Perhaps it is not yet a fully developed alphabet and as in any other alphabet, some 'letters' are more frequently used than others. But by coupling 'the letters' in different ways we can start mapping the family tree of games and the relations between its members.

In the following, I discuss the fifteen elements included in Salen's and Zimmerman's chart and to what extent and in what ways these elements manifest themselves in *Urgent Evoke*. This approach is not very gentle to the eight particular theories, as the elements in the chart are pulled out of the complex whole that the authors have carefully pieced together. But the theories' individual complexity and consistency are sacrificed in order to enable a broader, more open and flexible discussion of what a game is and can possibly be. While much of the following discussion is based on the original work of the authors represented in the chart, I also occasionally draw on texts from other game researchers when such work can complement or expand the discussion.

The fifteen elements

No.1: Proceeds according to rules that limit players

Rules are part of seven of the eight definitions integrated in Salen's and Zimmerman's chart. It is therefore safe to say that rules are one of two elements accepted by a majority of the authors as a defining element of games. 'Goals' is the other such element, which I discuss later in this chapter.

Even though we all have a common-sense understanding of what a rule is, understanding what rules mean to a game is not so straightforward.

Different types of rules exist in games – there are the explicit game rules (e.g., in order to win the game you have to race a car ten times around a circuit in the least amount of time) and the (often) implicit rules (e.g., players shake hands at the end of the game). The explicit game rules are designed by the game developers and accepted by the players. It is the rules that form the game and one can play only if one agrees with them. Bernard Suits says:

> *In games I obey the rules just because such obedience is a necessary condition for my engaging in the activity such obedience makes possible. But in other activities - e.g., in moral actions - there is always another reason, what might be called an external reason, for conforming to the rule in question [....] In morals conformity to rules makes the action right, but in games it makes the action.* (Suits 1967: 154)

In other words, there is no game if we don't agree to the rules: they are what ignite the action of the player(s). But rules do not just ignite action, they limit actions as well. They are what Bernard Suits calls 'unnecessary obstacles' that restrict our means (you have to ride in the circuit, taking a short-cut is not allowed) and position our game activity in time and space (the Wimbledon Championship in tennis can only be played within two specific weeks in June and July on the grass courts of The All England Lawn Tennis and Croquet Club). Although we connect rules to obedience and limits, they are also about creating an opening in time and space where the game can take place (Huizinga 1955). This view of rules as a generator of resources as well as a source of limitations reflects the ideas of both Jane McGonigal and Jesper Juul, presented below respectively:

> *Rules place limitations on how players can achieve the goal. By removing or limiting the obvious ways of getting to the goal, the rules push players to explore previously uncharted possibility spaces. They unleash creativity and foster strategic thinking.* (McGonigal 2011: 21)
>
> *Rules specify limitations and affordances. They prohibit players from performing actions such as making jewellery out of dice, but they also add meaning to the allowed actions and this affords players meaningful actions that were not otherwise available; rules give games structure.* (Juul 2005: Kindle location 636 of 2079)

Combining the different theoretical takes on the rules introduced above creates a picture where rules are to be obeyed. They create limitations and make players overcome unnecessary challenges at the same time as they carry the potential to establish a special place in time and space where players can engage in

meaningful activities that unleash their creative and strategic potential.

Urgent Evoke has rules, but they are few and most of them are not very explicit. The clearest rule in *Urgent Evoke* is that in order to win the game players must successfully complete the game's challenges (mission and quests) and turn in an Evokation within the ten-week game period. Apart from that, it is a very open game, although players are discreetly pointed in the preferred direction by the list of the 10 skills and abilities that the game attaches to what it means to be a social innovator. This list contains appeals like:

> *Collaboration: Build a strong team. Work together to achieve what would be impossible to achieve alone.*
> *Local insight: Know your market. Meet local needs and build on local assets. Create solutions that fit the community*
> *(*http://www.urgentevoke.com/page/about-powers. Accessed 2nd November, 2016*).*

The first appeal about collaboration might be defined as simply good advice. But the second appeal about drawing on local insight and resources comes close to a rule: if it is not followed will a player be able to win the game when the World Bank in the end decides which Evokations to award?

The general rule-less character of *Urgent Evoke* leads some players to take the initiative to write a Code of Ethics. This initiative was supported by the game developers and runners, who placed the code on the *Evoke* blog for all players to see. The Code of Ethics was developed in a bottom-up process; even though it is not comparable to a set of game rules, the creation of the code indicates the player community's need for a shared set of behavioural guidelines.
The history of *Urgent Evoke* also contains a good example of rules that can be changed. At the end of *UE*'s initial ten-week running time, some players discovered an existing rule that winners could be no more than 35 years old. This rule had not been communicated very clearly and caused a lot of distress in the player community as many top players were older than 35 years and felt cheated by the rule. The debate ended with the World Bank changing the rule and restoring peace:

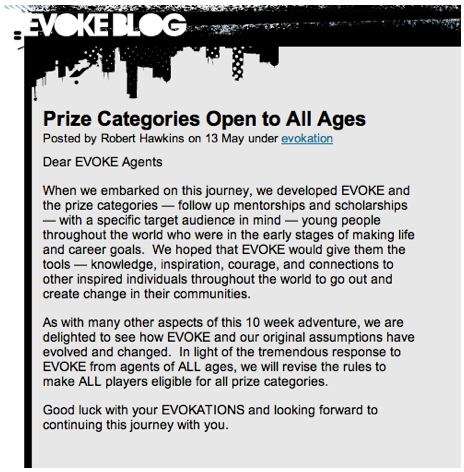


Figure 3: Screen dump from the Urgent Evoke *website retrieved the 8th of July 2016 from http://blog.urgentevoke.net/2010/05/13/ prize-categories-open-to-all-ages/*

But even though the rules of *Urgent Evoke* are open, somewhat vague and possibly negotiable they are part of what makes and characterises *UE* as a game.

No. 2: Conflict or contest

> *Conflict is an intrinsic element of all games. It can be direct or indirect, violent or nonviolent, but it is always present in every game.* (Crawford 1982: 12)

I tend to agree with this statement, even though only a few game theorists include conflict in their definitions of games.

One type of conflict is the contest itself, which is a struggle over different forms of resources, for example, power, recognition, food, money, medals and honor. *Urgent Evoke* is indeed a contest. Players compete against time (they have to develop an Evokation within ten weeks) and against each other (out of the 19,386 players, only 32 became winners). While not every game is a competition, the game can contain other types of conflicts. Costikyan does not use the word conflict, but talks about 'struggles' in games:

> *Let's make an analogy to fiction. The ur-story, the Standard Model Narrative, works like this: Our protagonist has a goal. He faces obstacles A, B, C, and D. He struggles with each in turn, growing as a person as he does. Ultimately, he overcomes the last and greatest obstacle and brings about some satisfying resolution. Do these obstacles all need to be The Villain, The Bad Guy, The Opponent, The Foe? No, though a good villain makes for a first rate obstacle. The forces of nature, cantankerous mothers-in-law, crashing hard-drives, and the protagonist's own feelings of inadequacy can make for good obstacles, too. Just so in games.* (Costikyan 2002: 15)

Besides the contest taking place in *Urgent Evoke*, the game has two other types of conflicts or struggles embedded in its missions and quests. The missions challenge the players to fight wicked problems such as hunger, poverty and pandemics. These wicked problems make for interesting and dignified

'opponents' to fight and even to lose to as they are characterised by being impossible to demarcate and solve because of their complexity and their constant evolving and changing nature. The complexity of these wicked problems also means that it is not possible to talk about solutions that are right or wrong; instead, one can talk about solutions that are more or less effective. This openness creates a room for player creativity.

The quests are aimed at the internal conflict that the player might experience as the game challenges her to become a post-game social innovator. The conflict could be a feeling of lack of experience, skills, knowledge, time or connections, among others.

The contest in *Urgent Evoke* is in many ways not very different from other contests – one competes against the clock and other participants. The difference is that winning could mean that your life will change because part of winning is the player's promise to become a post-game social innovator. The struggles in the missions and quests are in many ways also similar to the struggles that one meets in other games – level up your skills and your amour, slay the dragon and free the land and the princess and everyone will live happily ever after. The difference, however, is that the problems that one faces in *Urgent Evoke* are part of the physical world as we know it, and the skills needed are not directed at your in-game practice alone – one also needs them post-game in order to become a social innovator. The tension between in-game and physical reality in *Urgent Evoke* is present in the design of the game's conflicts and contest, and is part of what defines it as a socio-political game. I return to this tension later in this chapter when I discuss the elements of Goal-oriented/Outcome-oriented and Artificial/Safe/Outside ordinary life.

No. 3: Goal-oriented, outcome-oriented
Goals and outcomes together with 'rules' form the second element present in most of the game definitions represented in Salen's and Zimmerman's chart. The element is present in five of the eight definitions.

> *The goal is a specific outcome that players will work to achieve. It focuses their attention and continually orients their participation throughout the game. The goal provides players with a sense of purpose.*
> (McGonigal 2011: 21)

Jane McGonigal, the author of the quote above, unfolds her idea about the relationship between goals and games by saying that a clear goal in a game motivates the player because it tells the player what she has to obtain and why it is important. But in order for the player to reach the goal she has to know what steps she needs to take in order to get there. McGonigal calls that giving the player a sense of the 'actionable next step' (McGonigal 2011: 55).
In *Urgent Evoke*, the production of an Evokation forms a clear goal. The missions and the quests in the game can be seen as 'actionable next steps' that should provide the players with the stepping-stones needed to finally produce an Evokation.

But when it comes to goals and outcomes, *Urgent Evoke* and other Games4Change push our understanding of what a game is because these games also include a socio-political goal outside the game. That a game can have a goal outside the game is not new; we are familiar with it in 'ordinary' serious games where the post-game goal is a transfer of learning from the game to the physical world that should enable the player to use the knowledge gained in the game outside the game. But where the goal in 'ordinary' serious games is a personal goal (the individual player should have gained new knowledge and skills), the goal in Games4Change like *Urgent Evoke* is a political societal goal – the generation of post-game social change.

The goal in *Urgent Evoke* also evolves over time. At the beginning of the game, the player is presented with the goal of developing an Evokation. But once the player produces an Evokation, a new post-game goal is being formulated by the player herself. The realisation of some of these post-game goals are supported by the World Bank when they reward the winners with a mix of mentor-help, seed money and an opportunity to participate in a summit at the World Bank in the attempt to turn goals into post-game quantifiable outcomes. The evolution and support of goals and outcomes taking place in *Urgent Evoke* blur the line between in-game and out-of-game.

No. 4: Activity, process or event
Suits (1978), Abt (1970) and Avedon and Sutton-Smith (1971) are the authors in Salen's and Zimmerman's chart who define games as an activity. Suits uses the word 'activity' to describe the act of playing a game without discussing his choice of the word in depth – perhaps it just seems like a natural term for him. Abt, who connects game activity with decision making, says that games make us active because they place us in situations where we have to make decisions in order to reach the goal of the game. Avedon and Sutton-Smith echo Abt, but add to the complexity by defining games as both a physical and an intellectual form of activity taking place in a system where different powers are at play. The player, as Avedon and Sutton-Smith see it, not only has to make a decision but also needs to assess the strength of the different powers at play – including her own. For me, defining games as an activity is so obvious that one wonders why every game scholars do not include this element in their definitions. Perhaps the answer is that most other writers have found that 'activity' was not an exclusive enough element, as most other human undertakings – such as going to school, working or cooking – can also be defined as activities.

But as a communication scholar, I argue that 'activity' is a very important element of games that distinguishes them from other means of communication because games like no other medium ask for the player's active engagement. One cannot play a game without rolling the dice, jumping a fence or solving a riddle. But as Abt and Avedon and Sutton-Smith point out, by connecting the activity of games to decision making and power struggles, activity in a game is not just about the player performing certain actions. It is also a case of inter-activity between player and game: the game places the player in a situation in which a decision must be made, and that decision influences game play and subsequent decisions the player makes. This interactivity links the player and

game, the user and the medium in a unique way. In other words, the player is not merely a user, but also a co-producer of the game experience.
I find it easy to see that *Urgent Evoke* could be defined as an event that took place during ten weeks in 2010 and that playing the game could be described as taking part in a process of developing social innovative ideas. But what I find most interesting is looking at *Urgent Evoke* as a *system* of activities. The game offers players the chance to actively engage in missions and quests: to read and write about development projects, to chat with other players and build new social networks, to imagine new solutions to current problems and support other player's efforts to do the same. In other words, *Urgent Evoke* offers the players a variety of ways to actively engage with the game.

No. 5: Involves decision-making
I have already touched upon the element of decisions – Abt defines games as activities that involve decision making. In other words, the game asks the player to make a decisions and the player's choices change the game and influence the player's further game experience. But just as Abt connects decision making to activities, so does Costikyan connect decisions to the goal of the game by saying that in order for the decisions in a game to be meaningful, they must have a purpose and that purpose is provided by a clear goal in the game (Costikyan 2002).

In *Urgent Evoke*, the ultimate decision is: to be or not to be a post-game social innovator fighting to make the world a better place. As this decision is a life-changing decision that would probably take the breath away from most people, smaller actionable next steps (McGonigal 2011: 55) providing a path to the Evokation is built into the game in the form of missions and quests. During the game, the size and complexity of the decisions grow, bringing the players to the stage where making and considering implementing an Evokation might not seem as such a big leap any more.

No. 6: Not serious and absorbing
The definition of games as simultaneously not serious but utterly absorbing belongs to Huzinga, who in 1938 published the book *Homo Ludens*. In it, Huzinga describes how our culture is saturated with play; even our cultural rites and rituals constitute a form of play:

> *Can we now extend the line to ritual and say that the priest performing the rites of sacrifice is only playing? At first sight it seems preposterous, for if you grant it for one religion you must grant it for all. Hence our ideas of ritual, magic, liturgy, sacrament and mystery would all fall within the play-concept. In dealing with abstractions we must always guard against overstraining their significance. We would merely be playing with word were we to stretch the play-concept unduly. But, all things considered, I do not think we are falling into that error when we characterize ritual as play.* (Huizinga 1955: 18)

The empirical literature on games contains several accounts of players becoming so absorbed in their game that they forget about time and space (Yee 2014).

Despite Huzinga's definition and the many empirical accounts of the absorbing quality of games, I would not say that 'absorbing' is part of what defines a game in general – although it is part of what defines a good game.

Just as I do not see 'absorbing' as a defining element of games, I do not find it appropriate to describe games as not serious. This description implies that games play a trivial, insignificant and meaningless role in our lives, which I find degrading to the experience and the experiences that players get from playing games. Nick Yee demonstrates in his book *The Proteus Paradox* (2014) how games and virtual worlds influence and form us – not only online but also off-line. He writes:

> *Games are becoming an integral part of our lives – they are where we play, where we work, and where we fall in love. But technology isn't a neutral tool that simply bends to our will. When we adopt new gadgets, those gadgets help shape how we think, behave, and interact with one another.* (Yee 2014: 5)

The title of Yee's book contains the tagline, 'How online games and virtual worlds change us – and how they don't'. Yee argues that online games and virtual worlds affect us and change the way we think, behave and interact not only online but also in the off-line world. At the same time, we also bring the off-line world with us into the digital one in the form of, for example, racism and sexism or our human capacity to build trust and feel empathy. And as we to a larger and larger extent continuously move between online and off-line environments and the two worlds rub off each other (although in different ways), it becomes absurd to talk about the online part of our lives as not serious.

Urgent Evoke is a serious game aimed at empowering players to become post-game social innovators. This means that the developers of the game must believe that what happens in the game can influence the players' post-game opinions, feelings, conceptions, resources and behaviour, a belief that Nick Yee's research supports. In *Urgent Evoke* – as in most other games – fantastic elements are embedded in the storyline of the game; for example, are players members of a secret network of social innovators who possess innovative superpowers? But as we shall see in the analysis of the empirical material later, these fantastic elements do not change the players' sense of being part of something important that is worth taking very seriously.

I return to the discussion of serious/not serious when we reach element eight in the chart, Artificial/Safe/Outside ordinary life, because this element allows us to look at a game as a magical spot that is different from our off-line lives without classifying it as not serious.

No. 7: Never associated with material gain
If you do not want to do the hard work of levelling up in a new game, you can pay someone to do it for you. For example, the price for getting a new *World of Warcraft* character to level 90 was approximately $200 in 2013. This is called power-leveling, and there are people earning a living by doing it (Yee 2014).

This and other ways of earning money by playing a game – much like being a professional footballer – blur the line between work and play (Pearce 2006; Yee 2014). This poses a question: does the existence of professional power-levellers and footballers mean that *World of Warcraft* or football should no longer to be considered games? I do not think so, and I also do not think that it is possible to sustain the idea that games can never be associated with material gain. As a result, I do not include this element in my further discussion of what constitutes *Urgent Evoke* as a game.

No. 8: Artificial/Safe/Outside ordinary life

> *Games are fantasy. I don't mean that all games are about orcs and elves and magic spells, although far too many are; I mean that they ain't real. The fact that they aren't real is part of the point. Like fiction, games provide their own context; in a novel, a writer paints a picture of the world, portrays characters, provides context for the reader. Even if much of what the novel contains is drawn from the real world, the reader is expected to understand that this is not an accurate portrayal of real events; instead, he is supposed to be drawn into this unreal context, to take enjoyment from the events and characters described, and from the artist's skill in describing them.*
> (Costikyan 2002: 23)

There is no doubt that *Urgent Evoke* is a fantasy in the sense that its storyline is fiction. But as my analysis of the empirical data later in this thesis demonstrates, there is also no doubt that the social network established in *Urgent Evoke* and the players' experience of the game are very real to the people involved.

This ambiguity – the obscured lines between the physical world and game worlds and between fantasy and reality – is perhaps what prompted Edward Castronova to coin the term 'synthetic worlds' (Castronova 2005). In the book by the same name, Castronova argues that online games might present us with an artificial space, but what we experience in these spaces is no less real than what we experience in the physical world. He refers to Huzinga's concept of the magic circle as 'a special place in time and space created by a game […] As a closed circle, the space it circumscribes is enclosed and separate from the real world' (Salen and Zimmerman 2004: 95). He also contends that the circle is no longer closed but 'quite porous' (Castonova 2005: Kindle location 2308). And further, 'there is certainly a relationship between the synthetic world and the real one, and it is quite real on both sides' (Castronova 2005: Kindle location 2304).

What Castonova does is keep the magic circle in place, but makes it less solid, which allows the game world and the physical world to be two connected but qualitatively different spaces. Castronova agrees with Costikyan that the game world is a fantasy, i.e., a scripted artificial world, but unlike Costikyan, Castronova finds that our experiences in these synthetic worlds are as real as the experiences we have in the physical world, which support his argument with findings from the areas of market, politics and law. In Castronova's view, games offer us a different reality with different rules and natural laws, a reality where we are 'safe' in the sense that a bad decision made in the game will not lead to thousands of people dying from hunger or generate a flood of migration in the

physical world, and fantastic in the sense that the games allow us to live out fantasies of being knights or having social innovation superpowers.
In *Urgent Evoke,* fantasy and reality blend; the game design forces players to constantly move between being inside and outside the magic circle. For example, players are told to think of the game as 'real' (not a fantasy), that the game is not a simulation and that they are about to tackle real problems. The missions that the players tackle are fictive, but the background material provided to help players investigate the problem consists of authentic articles, papers and webpages from the physical world. The ultimate blend of the synthetic and physical happens when players have to complete the final mission and produce an Evokation, which is a bridge between the synthetic and the physical world. On the one hand, the Evokation leads players back to the physical world because it asks players is to identify a problem in the physical world that they would like to tackle post-game. On the other hand, the Evokation also brings the game and its magic into the post-game lives of the players as the Evokation is an artifact from the game that the players bring with them into the physical world.

I think it is possible to see the aim of G4C games as making the magic circle as porous as possible without breaking it down. This is done to ensure that a flow of resources – ideas, social networks, skills, knowledge – can move between the game and the physical world.

No. 9: Creates special social groups
This element derives from Huizinga's game definition. As I noted above, Huizinga's approach to games and play is that of a cultural anthropologist. He sees cultural rites and rituals as part of a play culture and is therefore also interested in the social groups that form around the rituals.
I do not think that every game generates a special social group that exists outside the time and place in which the game is played. But research shows that some games have the capacity to establish a 'third' space for people to meet (Steinkuehler and Williams 2006), and also have the ability to create a shared experience that can unite people – also outside the game (Yee 2014).
As I argued in the beginning of this thesis, *Urgent Evoke* belongs under the conceptual umbrella of social media because the game is designed to facilitate the creation of a social network among players and to harvest the potential power of it. Creating a special social group is therefore a defining element of *Urgent Evoke*. How this is done and how it affects the desired empowerment of the players is what this thesis is all about. This element is discussed more thoroughly in the other analyses of the game that are conducted throughout the thesis.

No. 10: Voluntary
For some of the authors in Salen and Zimmerman's chart, the element of voluntariness is an important part of what defines a game. In my perception, whether a game is played voluntarily or not does not influence the definition of the game itself, but it might influence the player's attitude towards playing.
The element of voluntariness is also becoming questionable as games move into all spheres of our lives. Today, we use games at work (e.g., in the US Army), in school (e.g., *Betty's Brain*), to exercise (e.g., *NikeFuel*) and even to beat cancer

(e.g., *Re-mission*). Not all games are played voluntarily, but because we are asked to do so by our boss, teacher, doctor, etc. With games like *Urgent Evoke*, which are aimed at generating player-driven post-game social innovation, our notion of what it means to play a game is challenged because it is not clear whether the activity taking place in the game should be considered play or learning or work or perhaps even philanthropy.

No. 11: Uncertain

> *Uncertain: the course of which cannot be determined, nor the result attained beforehand, and some latitude for innovations being left to the player's initiative*. (Caillois 1961: 9)

Caillois is saying that even though games are rule-governed systems, they always – to a greater or lesser extent – leave some room for player innovation and initiative. Uncertainty is what allows for interactivity to emerge in the game. Unlike the reader of a book or the moviegoer, a game player is confronted with choices during the game, and the choices made influence the further development of the game. The uncertainty empowers the player as an active co-creator of the game, a power that no other medium provides the user to the same extent.

In Games4Change, this element of uncertainty about the outcome of a game and the room for 'risk-free, active exploration of serious intellectual and social problems' (Abt 1970:13) is fundamental to the idea that games can generate player-driven social change.

In *Urgent Evoke*, there is a clear structure in which players have to accept the missions and quests that are developed in order to help them reach the goal of becoming social innovators. The game design also encourages collaboration and deliberation in different forms between the players. But the few rules and the wickedness of the conflicts/social problems dealt with in the game also leave the players with a large empty space to fill. It is the players who have to produce the content by sharing and discussing their research, knowledge and ideas about the wicked problems presented in the game and their possible solutions. So even though the game design creates limiting structures (e.g., you have to do the missions and quests imposed by the game), it also creates a space that enables player- initiated discussions, collaboration and creation. In that sense, the game can be seen as a tension between structures and openings, generating what could be called a space of potentials where the unanticipated, the player-driven innovation, can emerge.

No. 12: Make-believe/Representational

Both Caillois and Crawford define games as 'make-believe' and as a 'representation', but I prefer their alternative expressions - 'second reality' (Caillois 1961: 22) and 'a subset of reality' (Crawford 1982: 8). In my view, these expressions echo Castronova's term 'synthetic world' and his idea that games force us to think of reality not as a one coherent entity, but as a complex of assembled realities (Castronova 2005). Because of the strong parallel between the two categories of elements, I do not discuss the Make-

believe/Representational category further, but refer to the discussion in relation to element number 8 (Artificial/Safe/Outside ordinary life).

No.13: Inefficient
According to Salen's and Zimmerman's chart, only Suits defines games as inefficient. What Suits highlights is the absurdity that players are willing to accept rules that force them to use more resources than strictly necessary in order to reach a goal. For example, a runner accepts following a prescribed track instead of just finding the shortest way, even when he competes to be the first to reach the finishing line. Suits explains the player's acceptance of this inefficiency with what he calls a 'lusory attitude' (Suits 1978: 49). Having a lusory attitude means that one is willing to accept the hindrances that the rules create and invest the extra resources needed in order to play the game.

Suits's definition of games as inefficient is unproblematic when we talk about entertainment games, where no post-game 'output' is sought. But when games become political and game developers promise to generate post-game social change, as is the case with *Urgent Evoke* and other Games4Change, the definition does become problematic. Why? Because in a time where New Public Management gurus are doing their best to make the world 'lean', why should any public and private organisations want to use games if they are not efficient?
In order to answer this question, we must take a closer look at Suits's definition of games as inefficient. When Suits says that the rules of a game always create a situation where the gamer invests an unnecessary amount of resources in reaching a goal, he is at the same time telling us that gamers are willing to invest a lot – time, energy, cognitive effort and emotions – in order to gain access to the magic circle and play. But what is it that players find inside the magic circle that makes their investment rewarding?

Research on player motivation has produced a long and diverse list of reasons why players play – being efficient is not on the list. Instead, games are played because, among other things, they give players the opportunity to be social and form relationships, to immerse themselves in fantasies, to escape their daily lives and divert their minds, to challenge themselves, compete and achieve goals, to relax or feel excited and spend time on subjects they are interested in (Jansz and Maartens 2005; Yee 2006; Sherry et al. 2006). In other words, playing games is not about reaching a goal with the least possible effort; they are played because they give players access to feelings and experiences they value, and getting this access makes the investment of human resources and even money meaningful to the players. This means that games might be inefficient from a resource perspective, but at the same time efficient when it comes to generating meaning and engagement.

No.14: System of parts/Resources and tokens
Costikyan takes a systemic approach to games, which he defines as a system of resources and tokens. Games for him are an interactive structure in which players struggle to reach a goal by making decisions about how to manage the resources and tokens provided by the game.

Chris Crawford shares Costikyan's systemic view, but paints with broader strokes when he states in his *The Art of Computer Game Design* (Crawford 1982) that a game is a system - a collection of parts that interact in often complex ways. To me, Crawford's understanding of games fits very well with Wittgenstein's argument introduced in the beginning of this chapter that games cannot be defined clearly – we have to look for the 'family resemblances'. I have used Salen's and Zimmerman's chart of fifteen game definition elements as the basis for a discussion of what can characterise a game. This approach has allowed me to examine what Crawford calls 'the parts' that comprise games. The limitation of this approach is that it deals with the elements as separate components and that it can never catch or describe the systemic relationship, that the moment where a game comes alive as a result of the interaction between the parts/elements – and the players.

I share Crawford's and Costikyan's systemic take on games. *Urgent Evoke* is a system designed to facilitate certain activities (such as research, deliberation, innovation and peer review) that are intended to empower players to become post-game social innovators. As I elaborate later, this systemic view has inspired my choice of activity theory as the central theory in the theoretical framework of my analysis.

No. 15: A form of art

Defining art is as difficult as trying to define what a game is. By defining games as art, Costikyan is sending us down a really slippery slope definition-wise. But even though he is the only one of the authors presented in Salen's and Zimmerman's chart that defines game design as a form of art, he is not alone in recognising the artistic quality of the medium. In 2012, the Smithsonian American Art Museum in Washington DC curated one of the first exhibitions in the world to look at video games as an art form. Elizabeth Broun, Director of the Smithsonian American Art Museum said this about the exhibition:

> *Video games are a pervasive and exciting new medium that attracts exceptional and diverse artistic talent […] Video games present a unique and powerful form of expression, in the same way that photography, film, and many other types of art did before them.* (Broun in Melissinos and O'Rourke 2012: 7)

I am neutral about whether or not games should be defined as art, but I do find it interesting and significant that games have conquered such a level of cultural recognition that they have piqued the interest of museum curators.

In the beginning of this chapter, I used Wittgenstein to argue that it is not possible to clearly define games, but that we should instead focus on family resemblances. I suggested Salen's and Zimmerman's chart as a potential 'genetic alphabet' that could help us map the family 'genome' of games. I have now examined the fifteen game definition elements in this chart. My aim has been to discuss the elements in relation to a more general understanding of what defines a game and at the same time reflect on how and to what extent *Urgent Evoke* both incorporates these elements and challenges them, thereby pushing our understanding of what a game is.

In conclusion, I would like to add what I think is a missing element in Salen's and Zimmerman's chart by drawing what could metaphorically be called the 'DNA profile' of *Urgent Evoke*, in order to visualise what is characteristic of *Urgent Evoke* as a game.

A missing element

As noted above, Salen's and Zimmerman's chart has the potential to be a 'genetic alphabet' of games. But as the review of the elements above shows, I do not think that 'the alphabet' is fully developed yet, and as both game design and the scientific discussion of games keep evolving, we are bound to see some elements come and go.

One change in the chart that I would welcome would be the addition of 'the player' as an element. The player is included in Salen's and Zimmerman's own game definition, but because their chart is retrospective, the elements of their own definition have never been incorporated.
Salen and Zimmerman's game definition is as follows:

> *A game is a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome.* (Salen and Zimmerman 2004: 80)

They continue more specifically about the player:

> *A game is something that one or more participants actively play. Players interact with the system of a game in order to experience the play of the game.* (Salen and Zimmerman 2004: 80)

Salen and Zimmerman, like some of the earlier discussed authors and myself, subscribe to a systemic understanding of games. But the prominent position of the player in their definition is quite distinctive compared to other definitions and in my view quite interesting. For Salen and Zimmerman, it is in the interplay between player and system that the game is conceived. With such a definition, the player's actions in and experience with the game become central to an understanding of what a game is and can be.

This idea of an interplay between game design and player is also reflected in game designer Richard Garfield's concept of a 'meta-game' (Garfield 2000:16). Garfield argues that before, during and after the actual game play, a meta-game is taking place. Part of this meta-game is that the player always brings something to the game – a ball, an attitude, a motivation for playing, a goal, previous game experiences, skills – just as she always leaves with something – points, money, victory, new knowledge, friends or skills. In this perspective, neither game nor player are unchanged after their encounter with each other. Garfield's idea is in many ways supported by Bartle (1996) and Yee (2006), who have both written about player motivations. Bartle worked with the idea of four archetype Multi-User Dungeon players – Killers, Achievers, Explorers and Socializers – who he believed had different motivations for playing. Nick Yee used Bartle's idea to

conduct empirical research on player motivations. Instead of four archetypes, Yee ended up with the following model (Yee 2006: 773):

Achievement	*Social*	*Immersion*
Advancement Progress, Power, Accumulation, Status	**Socializing** Casual Chat, Helping Others, Making Friends	**Discovery** Exploration, Lore, Finding Hidden Things
Mechanics Numbers, Optimization, Templating, Analysis	**Relationship** Personal, Self-Disclosure, Find and Give Support	**Role-Playing** Story Line, Character History, Roles, Fantasy
Competition Challenging Others, Provocation, Domination	**Teamwork** Collaboration, Groups, Group Achievements	**Customization** Appearances, Accessories, Style, Color Schemes
		Escapism Relax, Escape from Real Life, Avoid Real-Life Problems

Table 1: Reproduction of Yee's model of motivation subcomponents presented in 'Motivation for Play in Online Games' *by Nick Yee (2006).*

Yee's research confirms that players play for different reasons, and that these motivations influence the players' way of playing and their use of the affordances of the game design.

What Garfield's concept, Bartle's idea and Yee's findings add to Salen's and Zimmerman's definition is the idea that the player engages not just with a predefined system, but that she affects and adds to the system with the artefacts, human resources and motivations that she brings into the system. Moreover, the result of the interplay between player and game is more than a 'quantifiable outcome' – it is a transformation of the game system as well as the player. Introducing the player as an element in the game definition means that any deterministic view of games must be abandoned and a constructivist understanding applied. This means that a game must be seen as, in the words of Jane McGonigal, 'a space of potentials', and that these potentials are only realised when the player is motivated and able to recognise, add meaning to and unfold them. Therefore, it is in the interplay between the potentials offered by the game design and the motivation and resources of the player that the game emerges.

Characterising Urgent Evoke

I have reviewed the fifteen game definition elements in Salen's and Zimmerman's chart and added one. Of the original fifteen elements, I have dismissed two (No. 7: Never associated with material gain and No.10: Voluntary), and declared myself neutral with respect to another (No.15: Games are a form of art). I have also turned two elements into one (No. 8: Artificial/Safe/Outside ordinary life and No.12: Make-believe/Representational). As a result, I end up with 12 elements that can help us talk about the family of games and what characterises the games we play and research.

While I think that the review of the game definition elements has enabled a broad and multifaceted discussion of what a game can consist of, the discussion has also been fragmented in the sense that the elements have been discussed individually and not as the complex whole they form together. That treating the elements separately is nearly striding to nature has been evident during the review, where discussing one element without drawing in one or several other elements has been difficult and not always possible. But even though I have chosen to treat the elements individually, there should be no doubt that I think that it is in the compilation of elements used (to a varying degree) that games emerge. But because a lot of words have already been used to describe how the different elements separately characterise *Urgent Evoke* and a lot more words are needed to describe the complex whole the elements form together, I have chosen to conclude this chapter by combining the elements in a sketch of the 'dna-profile' of *Urgent Evoke*.

The profile picture illustrated graphically below gives a visual impression of the characteristics of *Urgent Evoke*. It should be underlined that the picture is an expression of my interpretation of the degree to which the 12 game definition elements that I find relevant are represented in the game. The scale used ranges from 'the element is not at all characteristic of *Urgent Evoke*' (at center of the web) to 'the element is very characteristic of *Urgent Evoke*' (at the edge of the web).

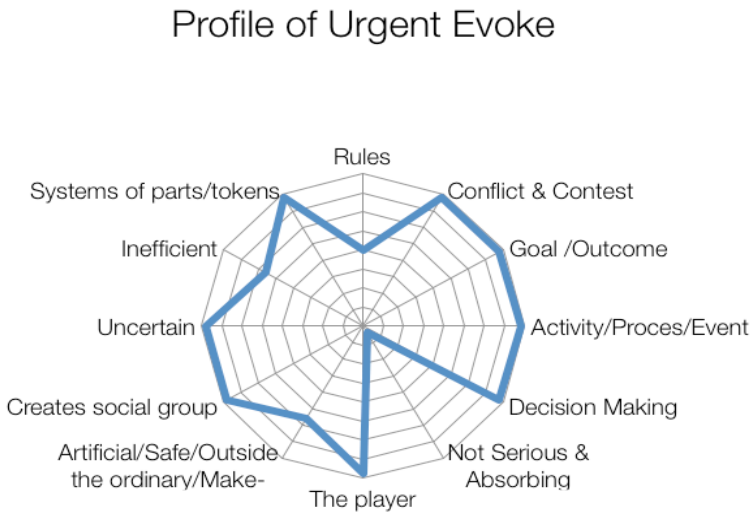


Figure 4: Profile of Urgent Evoke characteristics

After having used Salen's and Zimmerman's chart of game elements to discuss what a game can be as well as what characterises the design of *Urgent Evoke*, I continue now with the description and analysis of the design intentions that are the focus of part one of this thesis. In the next chapter the design of the game's interface and its functionalities is the object of my interest. I wish to show through this analysis how the designers provide the players with different potentials that can support their development into social innovators.

Chapter 2
GAME DESIGN ANALYSIS

> *Creating a game means designing a structure that will play out in complex and unpredictable ways, a space of possible action that players explore as they take part in your game […] But game designers do not directly design play. They only design the structures and contexts in which play take place, indirectly shaping the actions of the players. We call the space of future action implied by a game design the space of possibility […] Game design is an act of faith – in your rules, in your players, in your game itself.* (Salen and Zimmerman 2004: 67)

For Salen and Zimmerman, the design of the game is only the beginning. What will happen when the players use the game can only be anticipated, never predicted. The following is therefore not a game analysis, but an analysis of *Urgent Evoke*'s game design that focuses on the interface. The aim of this chapter is to present the game's interface and its functionalities in order to analyse how the design choices are intended to facilitate the empowerment of the players.
To stay with my earlier contrast of Habermas and Foucoult and their different approach to science, this chapter is about what could be, about designing a space of potentials.
Later in the thesis, the structures described here will be revisited, but this time we view them through the eyes of the players. It is at that moment – in the encounter of intentions and experience – that what is possible to achieve with a G4C social network game in the terrain of citizen-driven social innovation becomes visible.

Analysing the interface

In the following, I describe and analyse *Urgent Evoke*'s interface. I focus on the functionalities of the game and the affordances that they intend to offer the players in order help them reach the goal that the World Bank formulated for the game.

In order to describe the game design without becoming lost in detail, I have chosen to focus on the functionalities offered on the game's opening page and the player's profile page. These two pages provide an insight into how the interface, the functionalities and the game play are designed.

The opening page

The screen dump on the following page shows the opening page of *Urgent Evoke*. The game is constructed on a Ning template[18]. The interface of the game is in 2D – it is simple, but visually strong. The main opening page leads to a series of sub-pages and a mix of digital artefacts (e.g., links to external sites, blogs, jpegs and Mp3 recordings) incorporated into the site. The design of the interface is to a large extent based on images and sound, bringing the use of text to a minimum.

[18] Ning is a company that hosts and creates templates for online social communities. See ning.com.

For example, the instructions about how to play the game are delivered as five video files.
The opening page consists of four core elements:
1. The navigation bar at the top of the page;
2. The column on the far right offering different opportunities to access and follow the game;
3. The graphic novel (center-left) covering two thirds of the page; and
4. The horizontal bar at the bottom making it possible to access the missions directly.

These four elements are identified on the screen dump on the following page and are described in more detail below.

Figure 5: Screen dump of the opening page of the Urgent Evoke website, retrieved 8 July 2016 from www.urgentevoke.com

1. The navigation bar at the top of the page contains the functions: About, How to play, Powers, My profile, EVOKEblog, Missions, Quests, Evidence, Agents, Leaders and Discuss. The bar makes it easy for the players to move between important functions in the game. Even though the structure of the interface changes on the subpages, the navigation bar is a fixed, recurring element. A click on one of its functions leads to subpages described below.
The 'EVOKEblog' is the communication tool of the developers/community directors; this is where they post information for the players about, for example, developments in the game design or responses to players' questions.

'About' and 'How to play' are two sub-categorise of the EVOKEblog that occupy an independent spot in the navigation bar because they lead players to important background information. 'About' is a blog page with a short description of what the game is about. The 'How to play' page consists of five video files with recordings of a man explaining in a deep and mysterious voice what an Evoke is, what the players' missions are, how to do a quest, what the evoke powers are and how to win the game. The content of the five files can also be accessed in writing. In UE the word 'rules' is not used and the 'How to play' section does not provide at set of rules such as we know from the board game *Monopoly*, for instance. 'How to play' provides a description of a mindset that the developers would like the players to adopt. For example, players are told:

> *This is not a simulation. You are about to tackle real problems [...] When we evoke, we look for creative solutions. We use whatever resources we have. We get as many people involved as possible. We take risks. We come up with ideas that have never been tried before [...] Your mission is to practice your world-changing skills, right now, wherever you are [...] Every hero has an origin story. It's time for you to discover yours*
> (http://www.urgentevoke.com/page/how-to-play).

'Powers' is another function in the top navigation bar that contains a list of ten skills and abilities that the developers think players need in order to become post-game social innovators. The powers are: Collaboration, Courage, Creativity, Entrepreneurship, Local Insight Knowledge Share, Resourcefulness, Spark, Sustainability and Vision. All ten powers are described with a few words:

> *Collaboration – Build a strong team. Work together to achieve what would be impossible to achieve alone.*
> *Courage – Take risks. Dare to tackle seemingly unsolvable problems. Take a stand for what you believe in. Face your fear.*
> *Knowledge Share – Find fascinating facts. Share what you know. Empower as many people as possible.*
> (http://www.urgentevoke.com/page/about-powers).

The ten powers can also be found on the individual players' 'Agent Profile' page; during the game players can be rewarded points for each of the ten powers by other players and by the game runners. A high score leads to a spot on the game's different leader boards. How this works is described later.
A click on 'My profile' in the top navigation bar takes the player to her own

'Agent Profile' page. The functions 'Missions' and 'Quests' lead to the different missions and quests of the game. There are ten of each. The missions are about finding innovative solutions to wicked problems such as:

> *002 FOOD SECURITY – We saved Tokyo. Now it's your turn. More than one billion people go hungry every day. This week, your mission is to change at least one of those lives. You have the power to increase someone's food security – wherever you are. […]*
> (http://www.urgentevoke.com/page/food-security-1)

The quests are personal questions that are designed to cause the player to reflect on her own development as a social innovator. They are about the players' personal aspirations and strengths. They are also about what kind of challenges she expects to meet in her work as a social innovator and who could help her when it is time to implement her innovative ideas, exemplified here by quest number nine:

> *009 SECRET ALLIES No one person can change the world alone. So who do YOU want most by your side? This is your most important quest yet: Assemble your dream team of allies*.
> (http://www.urgentevoke.com/page/quest-009-secret-allies)

A click on 'Evidence' in the navigation bar causes a page to pop up that reports the evidence in connection with the missions and quests that has been produced so far by the community of players.

The functionality 'Agents' brings the player to a searchable list of all registered players.

Tap 'Leaders' and the players are taken to a page that lists players who have in different ways stood out during the game (Newest Heroes, Emerging Heroes, Questing Heroes, Heroes On a Mission, Power Generators, Mega Heroes, Heroes of the Week and Leading Powers).

'Discuss' leads to a page where players can chat with each other about different aspects of the game. A total 259 discussions were started in the 2010 game. Most discussions get 0–10 replies; only a few stand out with around a 100 reactions, one of which is the 'official help forum' and another is a call for teachers using *Urgent Evoke* to create a group.

As noted above, there are three elements that accompany this first opening page element:

2. The column on the far right offering different opportunities to access and follow the game is where new players sign in or where teachers who want to play the game with their classes can access the game resources – even after the official game has ended. It is also possible to link to different social media in order to follow *Urgent Evoke* on, for example, Facebook or Twitter.

3. The graphic novel is the centrepiece of the opening page. It is placed center-left and takes up two-thirds of the space. Its drawing style is contemporary and realistic. It resembles the film noir genre, with a sinister gloomy atmosphere created by the use of a colour scheme that incorporates black as well as dusty grey, blue, green and purple tones. The graphics of the novel portray a world in trouble and leaves us with the feeling that the story is not to be taken lightly.

The graphic novel drives the game forward. Every week a new chapter is released and with it comes a new mission and quest that need to be tackled. The narrative of *Urgent Evoke* is the story of a secret social network of international agents with innovative superpowers capable of solving some of the most complex problems facing the world. The agents can be reached by sending out an 'Evoke'. The Evoke is answered by 'Alchemy', the leader of the network. He puts together a team of agents, who immediately gets into action. The team travels to all corners of the world to face problems like famine, epidemics and natural catastrophes. The team that we follow in the graphical novel consists of three members – Eureka, Ember and Quinn. Each member of the group has a defining background story and a set of characteristics, skills and knowledge that set them apart as individuals and create a very resourceful team capable of developing and implementing new social solutions.

The *Urgent Evoke* player is a member of Alchemy's secret Evoke network. Players are expected to work together with other players to help find solutions to the missions presented in the ten chapters of the graphic novel.

4. The horizontal bar at the bottom on the opening page – 'Start Mission' – takes the player directly to the mission of the week. Left of the Start Mission button there are two other directive buttons saying: 'Discuss' this episode and 'Investigate' this episode. Discuss this episode leads to the subpage 'Discussion' (mentioned above) where players can chat about the game and its mission and quests. Investigate this episode is a very important button: it leads to a page with links to external digital resources in the form of websites and blogs containing information and inspiration that are supposed to help players in their investigation of the game's missions and quests. The links lead to real-life information connected to the game's missions, stories about what it means to be a social innovator and about social innovations that are already changing the physical world for the better.

Agent profile page
Next to the opening page, the Agent profile page plays a very important role in the game play (see screen dump below). A registered player builds up a personal profile page within the game. This page is the only artefact that represents a person as a player in the game. In many ways, it resembles the personal pages we know from Facebook. It functions as a logbook as well as a communication tool among players. It is where players collect, showcase and develop their material from the completed quests and missions (written reflections, videos, links, photos). But it can also be personalised with photographs, personal information, a logo and the like, and used to communicate an in-game identity. Players can visit each other's profiles and communicate with each other by

leaving feedback or awarding each other ‘power points’ for one of the ten powers identified in the game as important skills for a social innovator.

The Agent Profile page consists of four core elements:
1. A navigation bar at the top of the page;
2. A column on the far right offering different opportunities to access and follow the game;
3. A vertical bar to the far left containing the player's name and place of residence, etc.; and
4. A large vertical field in the middle containing information about the player’s game play.

The four elements are identified on the following screen dump:

Figure 6: Screen dump of an agent profile page, retrieved 8 July 2016 from www.urgentevoke.com/profile/PaulHolze.)

In the Figure above, two of the four elements – the navigation bar at the top (1) and the column at the far right (2) – are consistent with the opening page. The narrow vertical bar (3) at the left of the page shows the demographic information that the player has provided (name, sex, city and country), and there is room for a photograph. The bar contains a hyperlink to Facebook, enabling the player to tie the game to his or her Facebook account. Last but not least, the bar can display a list and photographs of the first 15 of the agent's in-game friends.

The larger field in the middle (4) is made up by of four to five elements. The first element at the top of the page only appears (as in the example) if the player links to videos made or curated by herself. The second element shows which missions and quests the player has completed as well as how many achievement badges she has earned. There are six different badges for special achievements that can be earned in the game: for example, one badge is awarded to players when they complete their first mission, and another is rewarded to players who are awarded 100 points on one single power.

The third element shows how many power points the player has been rewarded for each of the ten skills that the game defines as those of a social innovator. (These skills were introduced above.) Players as well as the game runners can reward each other power points. The points do not affect the player's chance to win the game, but they give players a way to cheer each other on and provide each other positive feedback on actions made in the game. High scores on power points can lead to a spot on the eight hero lists of the game (Newest Heroes, Emerging Heroes, Questing Heroes, Heroes on a Mission, Power Generators, Mega Heroes, Heroes of the Week, Leading Powers).

At the bottom of the page, we find two elements devoted respectively to the quests and missions. Here the player blogs about his/her quests and missions, and there is room for other players and game runners to give feedback and provide suggestions.

When creating their profile, players are encouraged to stay true to who they are in the physical world: *'Remember: this is all about who you really are so don't invent a fictional persona. Be yourself!'* (http://www.urgentevoke.com/page/quest-list). A scan of the player list reveals that most players apparently used their real names.

Let us now turn to my analysis of how the game design forms a space of potentials intended to empower the players. This analysis is particularly – but not exclusively – focused on how the game is designed to facilitate the creation of a social network. This focus underscores the World Bank's choice to design *Urgent Evoke* as a social network game and thus stresses the importance that social interaction and social networks are attributed in relation to the aim of the game. The remaining part of the design analysis consists of five sections: 1) Complexity as a vehicle for the development of a social network, 2) A story about a heterogeneous network, 3) Freedom to participate in different ways and 4) Recognizing everybody, awarding some and 5) Community rulemaking.

Complexity as a vehicle for the development of a social network
Urgent Evoke players are presented with fictive missions built on the World Bank's experience with different types of wicked problems. These are complex problems that are inter-connected, and require a multi-disciplinary approach in order to find a successful solution. An example of wicked problem could be poverty, which is caused by multiple factors. In order to reduce poverty, several issues must be addressed, including education, culture, economic structures, infrastructure and trade politics. And everyone from ordinary citizens to the leaders of the international political community must be involved.
The complexity of wicked problems also means that there is no one 'correct' solution; instead, multiple solutions need to be developed and implemented simultaneously. The complexity of the problems dealt with in *UE* means that it is impossible for the players to build up a basic understanding of the problem on their own: they need each other to research, discuss and develop their understanding of the challenges they face in the game.
By building *Urgent Evoke* on wicked problems, the game developers have created a space where there is no one right answer or one solution to the missions of the game. Instead, players are asked to explore the many facets of the problems and develop and discuss different possible solutions. Because there are no 'right' answers, it is difficult to be 'wrong', which creates an in-game environment where many different opinions and ideas can live side-by-side, and players can share and comment on ideas without being afraid that their answers are wrong.

Furthermore, founding *Urgent Evoke* on wicked multifaceted problems also allows players to approach the problem from many different angles and contribute to the discussion of the problem in many different ways. One player might have a personal experience with the problem treated in the missions and anecdotes to tell about the effects of the problem. Other players can perhaps contribute with a theoretical or a technical perspective, and still others might have searched the Internet for state-of-the-art knowledge on the problem, best practices and already tested solutions. The wickedness of the game's challenges therefore calls for many different forms of cultural capital and invites different types of players to contribute to the pool of shared knowledge created in the game.

A story about a heterogeneous network
Urgent Evoke's game play is driven by a narrative told in the form of a graphic novel. Every week a new chapter is released. As said earlier, the team that we can follow in the novel consists of three members – Eureka, Ember and Quinn.

Figure 7: Screen dump of page 7 of the first chapter of the graphic novel of Urgent Evoke*, retrieved 8 July 2016 from www.urgentevoke.com.*

These three characters are very different from each other. Ember is a married woman with two children struggling to find a balance between her work as an Evoke agent saving the world and her obligations as a mother. Eureka and Quinn are both single and Eureka in particular is looking for a partner, a search that sometimes jeopardises the secrets of the Evoke network. These three characters live very different personal lives; they also live in different countries, belong to different ethnic groups and have different educational backgrounds and professional experiences. In the narrative, it is the differences between the three members that make them a very resourceful team capable of developing and implementing new innovative solutions.
The narrative plays an important role in driving the game forward, but it also plays an important role in communicating the game developers' goals and ideas of what social innovation is, how it is created and who can do it. The novel relates to the reader the activities the three heroes take on in order to create the social innovations needed.

Through the narrative players are told that everyone can become a social innovator and that social innovations are created when people with different forms of knowledge, experiences and skills work together. Players are also told that in order to find solutions to the problems presented in the game, they need

to cooperate, respect and draw on each other's different strengths and types of knowledge. Furthermore, the novel also tells us that behind every seemingly ordinary person, a secret agent with innovative super power could exist. Eureka, Amber and Quinn are not superheroes, they are not Spiderman, Wolverine or the Silver Surfer. They do not have supernatural powers. What makes them stand out is their willingness to engage in social innovation, their readiness to help other people as well as their courage, imagination and ability to cooperate. Because the three protagonists are 'ordinary' and yet 'fantastic', it is possible for *UE* players to mirror themselves in the characters and use them as role models.

This analysis demonstrates that the narrative is an important tool in the game designers' attempt to recruit a diversity of players that introduces the idea that anyone can become a post-game social innovator and that cooperation and networking is necessary in order to succeed as a social innovator.

Freedom to participate in different ways
Together with the weekly release of a new chapter of the graphic novel, the ten missions and quests create a clear path, or a progression structure (Juul 2005) throughout the game. In order to win, one must complete the ten missions and quests and turn in an Evokation.

But even though *Urgent Evoke* is very structured and the goal is clear, it is possible for the players to create their own game play. *UE* players do not need to 'level up' to follow the progression of the game. They can take on the missions and quests they feel like doing, and spend as much time as they like (within the limits of the ten-week game period). It is possible to move back and forth between released missions, quests and chapters of the graphic novel, which means that players can catch up at any time during the ten-week run time. It is also possible to investigate the resources (links, blogs, Mp3, graphic novel, etc.) offered by the game without completing any missions or quests. *Urgent Evoke*'s structure is therefore an emerging structure – no one knows how the game will end because the players shape the game with their input (Juul 2005). This mix of progression and emergence gives players the freedom to play at their own speed and intensity, and makes it possible to create a large community of players that shares an experience for at least ten weeks, even though they might participate in the game in many different ways ranging from light usage to intense game play.

Recognising everybody, awarding some
To be considered for the awards offered in *Urgent Evoke*, the players must complete the 10 missions and 10 quests and submit an Evokation.
The Evokation works as a bridge to the physical world because it forces the player to focus on a problem outside the game. The problems are no longer drivers in good game play, but wicked challenges that challenge the lives of flesh-and-blood people. The kind of participation that the World Bank is looking for transcends the game: to win you must produce an Evokation that demonstrates your intention to turn your motivation for playing into a longer lasting commitment to creating a better world.

The word ‘winners’ is not used very often in *UE*; instead, terms such as ‘agents and agent teams selected for the various prize categories’ are used. This talking about a 'class' of participants and ‘selected agents’ and ‘teams of agents’ downplays the idea of winners and losers and recognises the value of every game participant.
UE players can also be awarded power points by other players and game runners for ten different skills:

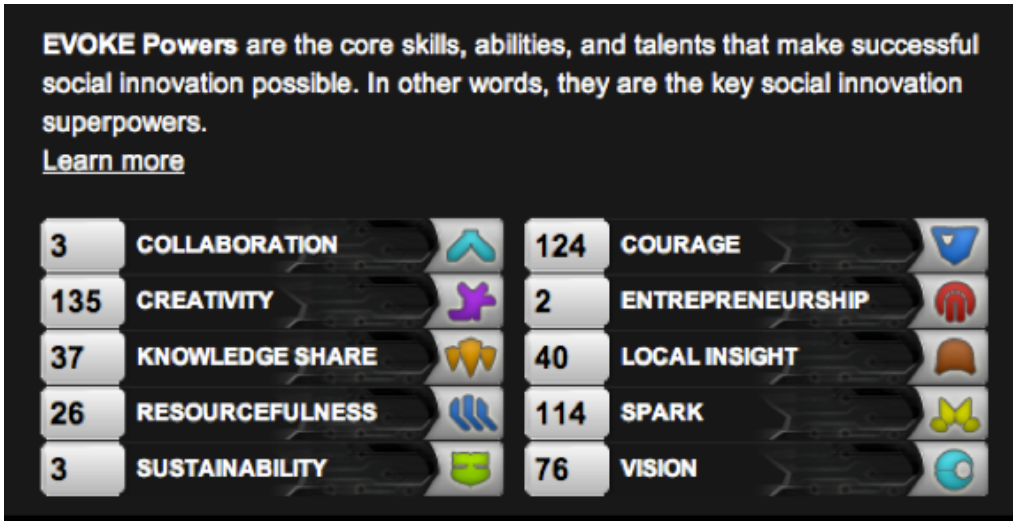


Figure 8: Screen-dump of a player profile page on the Urgent Evoke *website, retrieved 8 July 2016 from www.urgentevoke.com/profile/PaulHolze*

Note that the game developers call these ten skills 'key social innovation superpowers. Two of them, collaboration and knowledge share, focus on social aspects that are seen by *UE's game designers as critical to the game.*

In the description of the power ‘collaboration’, players are encouraged to ‘build a strong team. Work together to achieve what would be impossible to achieve alone’. Collaboration is the first power on the list, and the formulation used to describe it stresses the game developers' interest in creating a social network among the players. It also underscores the game developers' belief that the players need each other in order to face the challenges of the game – and the physical world, where they will hopefully operate post-game.

The game designers explain how to perform the power ‘knowledge share’: ‘Find fascinating facts. Share what you know. Empower as many people as possible’. Here the focus is not on the player herself, but on the social network she is part of and how she can help empower others by sharing what she knows and learns during the game. What the game developers are promoting here is the idea that the game is just as much about empowering others as it is about each participant developing winning ideas.

It is also possible to be recognised for rewarding power points to other players. *Urgent Evoke* operates with eight different lists of heroes: Newest Heroes, Emerging Heroes, Questing Heroes, Heroes on a Mission, Power Generators, Mega Heroes, Heroes of the Week and Leading. There is a list of those players of

the last 50 players who have completed a quest, and another that shows a random selection of the players who have earned between 10 and 50 power points. But another list is dedicated to the top 50 players who have rewarded the most power points to other players. By creating such a list, the game developers are communicating that looking at other players' work and cheering them one is an important part of the game and worth special mention on the heroes list.

The focus on and rewarding of collaboration, knowledge sharing and cheerleading communicates to the players that *Urgent Evoke* is not just about winning, but also about working together, empowering others by donating your own resources to the community and by giving as much positive feedback in order to spur others on.

Community rulemaking

> *Fixed rules are a core feature of games, but rules do not appear out of nowhere: they are created by players in folk games and by game designers in commercial games [….] Rules are designed to be 'above discussion' in the sense that a specific rule should be sufficiently clear that players can agree about how to use it. Rules describe what players can and cannot do, and what should happen in response to player actions. Rules should be implementable without any ingenuity*. (Juul 2005 Kindle location 594-602 of 2079)

Most game theorists include rules as a defining element of a game (Salen and Zimmerman 2004), and as Jesper Juul is says in the quote above, rules can be created by both players and game designers. They should provide structure to a game and should be so clear that players do not need to discuss them.

There is one *UE* rule – to try to win the game, you must accept all missions and quests and turn in an Evokation. But even though there is only one formulated rule, there are many implied rules in the form of strong incentive structures that indirectly guide the players in their activities. For example, take the formulation of the list with the ten powers (collaboration, creativity, knowledge share, resourcefulness, sustainability, courage, entrepreneurship, local insight, spark and vision). Nowhere is it stated that players who, for example, do not collaborate are cheating or will be thrown of the game. But it is clearly indicated in the list what kind of player behaviour the game developers – who will eventually decide who wins the game – would like to see.

Beyond the one rule and the strong incentive structures, players are left with a lot of freedom to create their own game play and use the resources offered by the game in a way the suits them. The lack of clear rules leave the players in a situation where there is no shared understanding of how to play the game, and they are encouraged to collaborate and co-create. This situation forces the players to begin discussing and negotiating the rules for such collaboration. Such a discussion is not always easy, but it does force the players to communicate in order to try to create a shared understanding of how to play the game. Such discussions led to some players formulating an 'Evoke Code of Ethics':

> *1. Make a positive contribution. I post only blogs, pictures, and videos that I believe will promote the awareness, knowledge, or enjoyment of other members of this community and advance their educational missions. […] 4. Always encourage, never disparage. Leave positive, helpful feedback and share links and connections that will add momentum to others' efforts. When I disagree, I will be respectful*.
> (http://blog.urgentevoke.net/2010/03/31/evoke-code-of-ethics-by-agents/).

Conclusion

The sub-question that has been guiding this work so far is: In what ways is the *Urgent Evoke* game design intended to empower players to become post-game social innovators?

The World Bank set out to create a digital, free-to-use learning tool with the purpose of empowering a new generation of citizens to become social innovators and generate positive social change in relation to some of the world's most wicked problems. Even though the game was targeted initially at players in Sub-Saharan countries, the game is open for all to play. By making the game open and free, the World Bank connected to the communitarian optimism coupled with the Internet 2.0 and the birth of social media. This indicates that the game is intended to empower people by making them work and think together by providing them access to a collective intelligence. These intentions combine ideas about social capital as an empowering resource expressed by thinkers like Bourdieu, Putnam and Lévy with the idea that games are characterised by creating social groups. I would say that creating an online social network is the number one way that the game is intended to empower the players. This idea is reinforced by and communicated through the game's interface design, in the narrative of the game, in the powers that the players are encouraged to develop and in the way that the game supports dialogue and collaboration.

Another way that indicates that the game is intended to empower can be found in the designers' blurring of the line between the synthetic and the physical world. *Urgent Evoke* offers its players a safe artificial space. Inside this magic circle it is possible to play the role of a social innovator with superpowers and come up with bold innovative ideas without being afraid that millions are lost or people die of hunger if one's idea turns out to be more creative than sustainable. But the magic circle of *Urgent Evoke* is also designed to give players a feeling of reality – the circle is perforated and the magic is mixed with wicked realities. The game is designed to open up for the players' social fantasies by including them in the make-believe of the narrative. At the same time, the design is also intended to provide the players with the experience of being a social innovator. This is achieved by letting them 'play' with real world problems, asking them to use their real name, telling them that this is 'for real', asking them not only to learn and imagine but to act throughout the game and by producing a detailed plan for post-game action – the main goal of the game.
A third way that *Urgent Evoke* is designed for empowerment is that the game offers a goal-oriented structure or process where actionable next steps pave the road to success and tokens are offered (badges, power points and awards) for

missions completed. Players are also offered a lot of freedom to shape their own game because, among other things, the game has very few explicit rules and because the wickedness of the problems dealt with in the game ensures a high level of uncertainty. There is not one right answer to the problems, but an infinite number of possible answers. The narrative, together with the missions and quests, are designed to ensure that the players know what to do next. As the game develops and the missions and quests become tougher, the players can also experience themselves becoming more and more virtuosic. In other words, the players begin to grow and develop as social innovators.

In this Part 1, I have related the design of *Urgent Evoke* to more general discussions of what a game can be. I have described how the design of the interface and the game's functionalities offer the players certain affordances. I have used the discussions and descriptions to answer the first sub-question of the thesis and pinpoint how the design is intended to empower the players.

I now change focus and move into the second part of the thesis, where the players' use and sense-making of the game are central of my analytical efforts. In other words, I turn my attention away from the ideal and the designers' intentions, and direct it towards actual game play and what it is possible to achieve in the terrain of player-driven social innovation with a game like *Urgent Evoke*.

PART TWO

Part Two of this thesis consists of four chapters. In Chapter 3, I introduce the two theories that form the theoretical lens of this thesis – Activity Theory (AT) and Social Network Analysis (SNA). I use the design analysis made in Part One together with the problem statement to argue for my choice of theories.

In Chapter 4, I present and discuss the methodological assumptions and methods used in this thesis. I talk about the philosophical assumptions that have guided my work and show how these assumptions have shaped my methodology. The Chapter ends with a discussion of the methods used.

In Chapter 5, I continue the analysis of *Urgent Evoke*, but focus this time on the players' use and sense-making of the game. The analysis is divided into three sections in order to underline the procedural understanding of the empowerment process that the game is intended to generate with the players.

And finally, in Chapter 6, I return to the main research question, address the understandings created during the thesis and present my conclusions.

Chapter 3
THEORETICAL FRAMEWORK

Activity Theory is my core theory. It is concerned with the interplay between humans and technology and how the dialectic relationship between the two drives cognitive, emotional as well as material development.

The theory offers a holistic understanding of development as a context-bound, (intra)personal, cognitive and emotional process as well as a cultural-historical, societal, material process. This complex framework fits well with the my goal for an in-depth single case study that produces a rich, context-dependent description of *Urgent Evoke* that provides a first-hand understanding of this new real-life phenomenon. In addition, the Activity Theory framework helps depict the complexity and nuances of the relationship between the game and its aim, the players and their motivations and the socio-historical context (Yin 2009).

Activity Theory offers a theoretical framework that tries to embrace the whole - the complex relationship between the parts as well as the context. A critique of the theory could therefore be that it makes it difficult to create and hold on to a focus in one's analysis because the smallest unit as well as the total system theoretically seem to be equally important. Using Activity Theory therefore calls for auxiliary theories that can help emphasise specific elements and their meaning, and thereby create a stronger theoretical focus on the parts and relationships in the theory that I find particularly relevant for my research. To create that emphasis, I have chosen Social Network Analysis as my supporting theory.

I chose Social Network Analysis (SNA) because social networks or communities are an important element in both Activity Theory and in the design of *Urgent Evoke*. It is important to strengthen the focus on the impact of the social connections between the players on their development as post-game social innovators. Because SNA is not only part of my theoretical framework but is also used as one of my empirical methods, it will also be discussed later in this Chapter in the section on methodology.

I first demonstrate how Activity Theory has developed from Vygotsky to Engeström and how the theory forms an interesting and relevant framework for analysing the workings of *Urgent Evoke*.

Activity Theory

Activity Theory (AT) is not a fixed theory with accurately described concepts. Instead, it is better seen as an evolving 'philosophical and cross-disciplinary framework for studying different forms of human practices as development processes, both individual and social levels interlinked at the same time.' (Kuutti 1996: 23). The generic, flexible and open nature of Activity Theory interests a variety of different research fields such as cognition, learning and teaching, organisational development, child development, therapy and, closer to my own project, human-computer interaction and studies of games and socio-cultural play (Engeström, Miettinen and Punamäki 1999; Holzman 2006; Ang, Zaphiris and

Wilson 2010). Because this wide embrace of Activity Theory creates a diffuse AT literature, I have not conducted a literature review. Instead, I have chosen to follow the line from Vygotsky to Leontiev and further on to Engestöm in order to depict how the different stages of the theory enable different analytical focus points. Engestöm himself refers to the developmental line as first, second and third Generation Activity Theory.

First generation

What is now called 'the first Generation of Activity Theory' (1GAT) grew out of the research conducted by Vygotsky and his colleagues Luria and Leontiev in Russia in the beginning of the 19th century. Vygotski (1896–1934), a psychologist interested in children's cognitive development, laid the groundwork for Activity Theory by suggesting that *activity* is the key to understanding human development. Furthermore, he saw all human activity as being tool-based - our access to the world must be understood as mediated by the tools we use. Vygotski's idea can be visualised in the following way, where the activity of the subject is directed at an object and mediated by an artefact/tool/technology. This interaction leads to an outcome/learning:

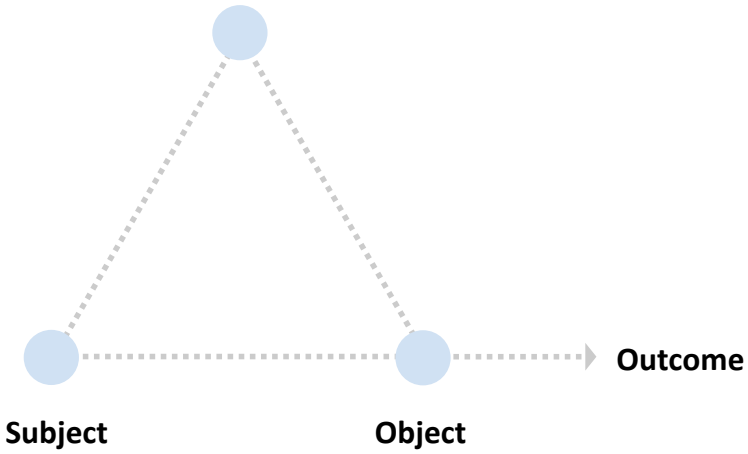


Figure 9 Reproduction of a common model of Vygotsky's mediated action found on http://www.helsinki.fi/cradle/chat.htm

Vygotski's focus on activity can be seen as a reaction to early 20th century developments in two contemporary psychological theories: psychoanalysis, with its focus on the intra-personal, and behaviourism, with its focus on the external conditions. Inspired by Marx's and Engels's ideas about a dialectic relationship between human thought and the socio-material world, Vygotski saw human and social development as interconnected because they are both the result of human's active tool-mediated participation in social life (Kaptelinin and Nardi, 2006).

The definition of tools in Activity Theory is very broad, ranging from language and mental maps all the way to hammers and pencils. Tools both enable and restrict our interaction with the world and in that sense shape the way we experience and make sense of the world. At the same time, we humans also shape and change the tools while using them:

> *The interactions in which individuals engage allow opportunities for mediated*

> *action that contribute to the social formation of their consciousness. In this interaction, individuals are not passive participants waiting for the environment to instigate meaning-making processes for them, but, through their interactions, individuals make meaning of the world while they modify and create activities that trigger transformations of artifacts, tools, and people in their environment*. (Yamagata-Lynch 2010: 16)

The tools we use are products of previous cultural historical developments. When we use them, we internalise the culturally and historically shaped resources that the tools carry with them. But in the process of learning and developing, we also externalise our knowledge by changing the tools we interact that enables new cultural and social development. In this dialectic understanding of development, the personal and the sociocultural are linked in a continuous movement between internalisation and externalisation, reproduction and transformation (Engeström, Miettinen and Punamäki 1999). But it is important to understand that the dialectic relationship in AT is not a symmetrical one:

> *The notion of activity cannot be extended to all types of interactions. In activity theory, any activity is an activity of a subject. Not any entity is a subject. Subjects live in the world; they have needs that can be met only by being and acting in the world. Information-processing units, for instance, do not have 'needs; (except in a metaphorical sense) and cannot be considered subjects. Therefore, interaction between the subject and the object […] is not a symmetrical relationship between two components of a larger-scale system. The interaction is initiated and carried out by the subject to fulfill its needs.* (Kaptelinin and Nardi 2006: 32)

The asymmetry found in the relationship between the subject and the object is also present in the relationship between the subject and the tool in AT. Because AT sees any activity as ignited by the subject's wish to fulfil its needs, the subject is always the initiator of and actor in the activity. While tools have a prominent place in AT because human development is seen as enabled and constrained by the refinement of the tool, they can never be seen as an actor as in Actor-Network-Theory. Instead, tools are a carrier of potentials that can be deployed and expanded by the subject.

In Vygotski's thinking, learning and development also have a social dimension, which can be recognised in his concept of zones of proximal development (ZPD). The zone of proximal development should be understood as the:

> *distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers.* (Vygotsky in Engeström, Miettinen and Punamäki 1999: 62)

The idea is that learning should not be seen as an exclusively individual process but as a social process where we learn from and with other people as we actively participate in social life. I also see in Vygotsky's idea about 'zones of proximal development' a reference to the concept of 'actionable next steps' introduced above in Part 1. But where Vygotsky refers to adults or more capable peers guiding

children, ‘actionable next steps’ refers to the structure of the game that shows players how to proceed. In my view, using AT in my analysis opens up an interesting discussion of how the design of *Urgent Evoke* can create ‘zones of proximal development’ or ‘actionable next steps’ that can support the players in their empowerment process.

My interest in Activity Theory was sparked in my first encounter with it. I realised that *Urgent Evoke* (tool) and its aim (object) of empowering (cognitive and emotional development process) players (subject) to become post-game social innovators (outcome) was mirrored in the basic model of the theory.

AT’s understanding of the tool and the dialectical relationship between the subject and the tool provided me with a way to theoretically describe human development that matched the way I understood the intentions behind the design of *Urgent Evoke*. With AT, the players are not defined as passive receivers of educational content, but become active learning individuals using the game as a tool to reach their goal. This idea matched my understanding of how the players play an important role in making a game a game, and that it is in the interaction between design and usage that the game gains it meaning.

Furthermore, I found that AT links human learning and creation in a way that makes it possible to see the seed for a theory of innovation and social change. Even though AT has its roots in psychology, the theory’s dialectical understanding of the relationship between humans and technology and its continuous process of internalisation and externalisation opens up an analysis where learning and creation meet. In such an analysis, learning manifests itself not only as an intra-personal development where, for example, *UE* players begin to see themselves as social innovators, but also as a externalised process where new tools are shaped and social change instigated, for example, as *UE* players succeed in developing and implementing their Evokations.

But *Urgent Evoke* is a social network game. Because it is defined by this distinct characteristic, I miss in Vygotsky’s fundamental work a more developed social dimension that can help me understand and describe the influence of the game’s social network on the players' development. Vygotsky’s concept of ‘zones of proximal development’ contains a social element, but it is not until the second generation AT that the social perspective becomes unfolded, as the following description demonstrates.

Second generation
In the second generation of Activity Theory (2GAT), the social aspect of learning and development touched upon in Vygotsky’s concept of zones of proximal development becomes central. Leontiev, the godfather of 2GAT, sees all human activity as social; as the Figure below demonstrates, he added a new 'bottom' to Vygotsky’s initial model:

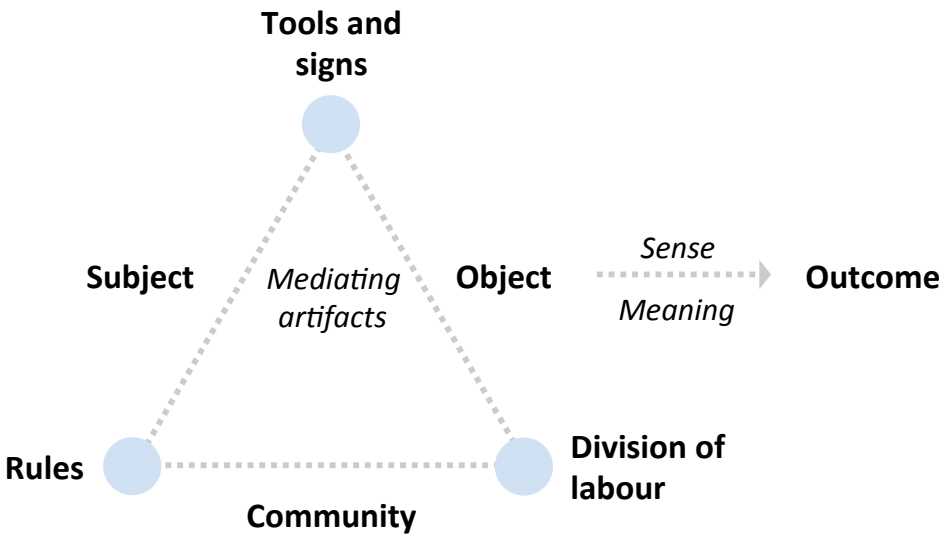


Figure 10: Reproduction of model of 2GAT from Engeström 2001:135

In 2GAT *rules, community* and *division of labour* are added to the triangle. Thus, the model no longer just depicts a simple relationship between subject, technology and object. It now outlines a whole activity system and visualises a complex systemic view of learning and development. The learning subject in 2GAT has become embedded in a community that operates according to a set of rules and a division of labour among its members:

> *Labour is a process, as we have seen, that is realized not by a lone being, in ways peculiar to himself alone, but under conditions of people's joint activity, under conditions of a human collective, and, as I will try to especially emphasize, in a social, that is, collective expressed way. Through this process, people enter into communication with one another. It is not so much a matter of communication that is primarily verbal, of course, but of communication in the sense of participation in a joint action, in the sense of participation in the process of labour, first and foremost*. (Leontiev 2005: 60)

With Leontiev, AT becomes a social learning theory. H*ow* and what we learn should be understood as a result of the division of labour among the community members. Leontiev uses a hunting game as an example: the hunt is an activity performed by a community of people. During the hunt, the participants divide the labour among themselves – some take the role of the beater, other the role of the killer. The beaters make noise in an attempt to scare the deer and chase it in the direction of the quietly waiting killers, who are ready to put the animal down, which is the goal of the collective activity. Leontiev demonstrates in this example how activities are rooted in a social context and how participants in the activity take on different jobs or play different roles. Depending on the role the subject plays, she will have different learning opportunities. The division of labour in a community is therefore important to the subject's development process.

But Leontiev's example not only underlines the social aspect of learning and how the division of labour influences the subjects individual learning process. It also emphasises the importance of having a clear, shared goal in order for the learning

community to be able to function. Without a shared goal, the division of labour becomes impossible because the subjects cannot make sense of their individual activities. So it is that Leontiev underlines how the goal of an activity is important for the interplay between the community and the individual player, and for the player's meaning making or learning. Meaning making for Leontiev is the concept that describes human learning – as it is in the process of meaning making of our enactments/performance and experiences in the activity that we learn or even change:

> *Leontiev explained consciousness development as a self-regulated meaning making process driven by goals and motives in which individuals or groups of individuals choose to participate. This includes both mental and physical enactments of the activity that are interlaced throughout an individual's meaning making process. Within an activity, the events that occur and the consequences the participants experience can qualitatively change the participant, his/her goals and motives for participation, the environment, and the activity itself.* (Yamagata-Lynch 2010: 21)

This understanding of learning and development as a process of social meaning making, where having a clear goal is a driver for the social interaction and communication in the learning community, again influences the subject's possible development process. It provides us with the opportunity to understand *Urgent Evoke* as a designed 'meaning making system'. In this understanding, the goal of the game becomes important, as it is the goal that enables the formation of a player community and a division of labour among the players. And it is the division of labour that frames the players' experiences with the game. These experiences can 'qualitatively change' the player, her goals and motives in a way that empowers her to see herself as a possible social innovator.

Furthermore, I can recognize several other UE characteristics in Leontiev's description of learning as a social, rule-based and goal-oriented endeavour.
To explain the relationship I see between AT and *Urgent Evoke*, I have created a *UE* version of the 2GAT model:

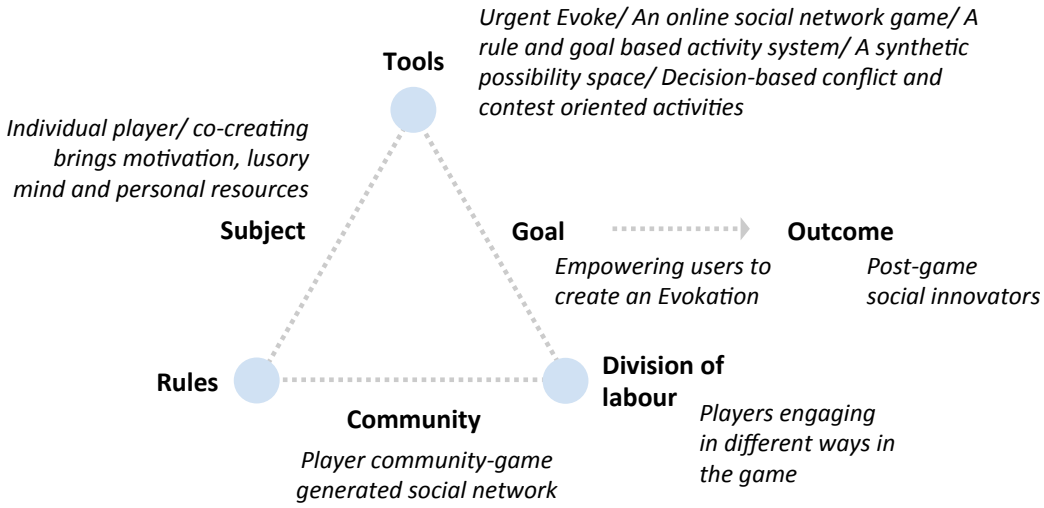


Figure 11: A 2GAT model of Urgent Evoke

Leontiev's strong focus on meaning making and on how the division of labour influences the subject's learning and development is interesting. It calls for an equally strong analytical attention to the influence of the game design on the players' meaning making process as well as their formation of a community and creation of a division of labour.

I have now pinpointed Activity Theory's dialectical, systemic, social and tool-based understanding of human as well as technological and cultural development as a reason for my choice of the theory. I have addressed the players' individual process of meaning making and the communitarian division of labour as important focus points in my use of AT in the analysis of how a game like *Urgent Evoke* can generate empowerment.

But even though the 2GAT already offers a complex theoretical framework, I still miss conceptual tools in the theory that can help me understand how the resources built during the game can be transferred to the physical world. In other words, I need to be able to theoretically expand my analysis from focusing on one isolated activity system (the game) to an analysis that includes other activity systems (the players' meeting with other activity systems in the physical world post-game). This is where Engeström's third generation Activity Theory comes into the picture. As he says: 'the third generation of activity theory needs to develop conceptual tools to understand dialogue, multiple perspectives and voices, and networks of interacting activity systems' (Engeström 1987: 6).

The following section outlines Engeström's idea and focuses in particular on how he incorporates the perspective of networks of interacting activity systems.

Third generation
In Engeström's 3GAT, the model of the activity system grows, and we are introduced to the following image:

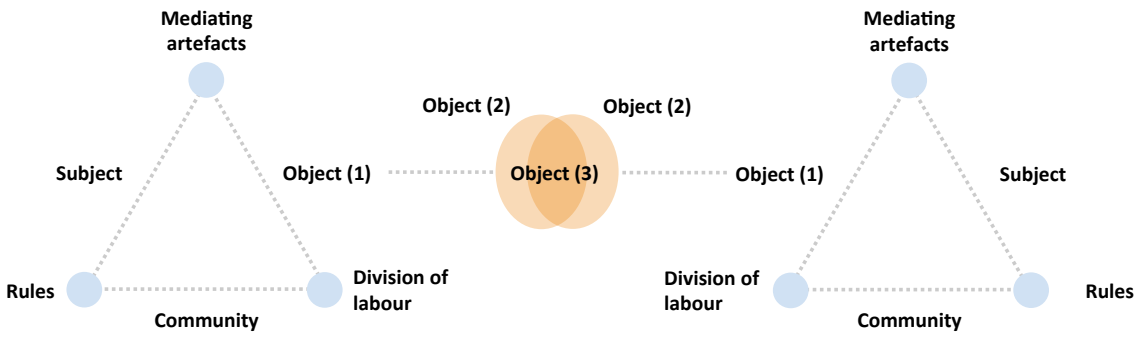


Figure 12: Reproduction of model of 3GAT from Engeström 2001:136

2GAT expands Vygotsky's foundational work by emphasising the social dimension of development and by introducing rules, community and division of labour as new categories in the activity system. 3GAT unfolds the concept of the social even further by focusing on networks of activity systems that are linked to each other. In Engeström's perspective, an activity system is never isolated; it should always be seen as part of a network of interacting activity systems. The systemic thought

introduced in 2GAT is enhanced in 3GAT: the theory impels us to not only analyse how learning and development take place in an individual activity system, but also how they take place on a larger social scale in the negotiations and interactions between activity systems.

In 3GAT, the object plays the role of linking the systems together, which changes the nature of the object and its potential. Engeström uses the example of a patient-doctor meeting to describe this new role:

> *[…] the object moves from an initial state of unreflected, situationally given 'raw material' (object 1; e.g., a specific patient entering a physician's office) to a collectively meaningful object constructed by the activity system (object 2, e.g., the patient constructed as a specimen of a biomedical disease category and thus as an instantiation of the general object of illness/health), and to a potentially shared or jointly constructed object (object 3; e.g., a collaboratively constructed understanding of the patient's life situation and care plan). The object of activity is a moving target, not reducible to conscious short-term goals.* (Engeström 2001: 136)

Thus, the object in 3GAT is a moving object that changes in the process of negotiation and construction performed by the subjects participating in the interacting activity systems. When describing his own figure (shown above) Engeström says:

> *The object is depicted with the help of an oval indicating that object-oriented actions are always, explicitly or implicitly, characterized by ambiguity, surprise, interpretation, sense making, and potential for change.* (Engeström 2001: 134)

What the object will be is thus open-ended and depends on the communication between the participants in the involved activity systems. In Engeström's example, there are objects 1, 2 and 3. But it is not given that every interaction between the involved activity systems leads to the development of a shared third object because this is dependent on the communication that is to take place between the systems.

Engeström developed the concept of Expansive Learning (EL) (Engeström 1987) in his work with 3GAT. Expansive Learning is defined by the idea that 'learners are involved in constructing and implementing a radically new, wider and more complex object and concept for their activity' (Engeström and Sannino 2010: 2), i.e., objects and activities that have not yet been defined:

> *The essence of [expansive] learning activity is production of objectively, societally new activity structures (including new objects, instruments, etc.) out of actions manifesting the inner contradictions of the preceding form of the activity in question. [Expansive] learning activity is mastery of expansion from actions to a new activity. While traditional school-going is essentially a subject-producing activity and traditional science is essentially an instrument-producing activity, [expansive] learning activity is an activity-producing activity.* (Engeström 1987: 133–134)

In this quote, Engeström defines what form he wishes the 'radical new' to have. What he is looking for with expansive learning is not an activity system that produces 'new' subjects or new tools, but new activities that can generate new learning processes. In this understanding, learning becomes an ongoing iterative cyclical movement. Engeström divides this movement into seven learning actions (Questioning, Analysis, Modeling the new solution, Examining and testing the new model, Implementing the new model, Reflecting on the process and Consolidating. The following is a depiction of the expansive practice:

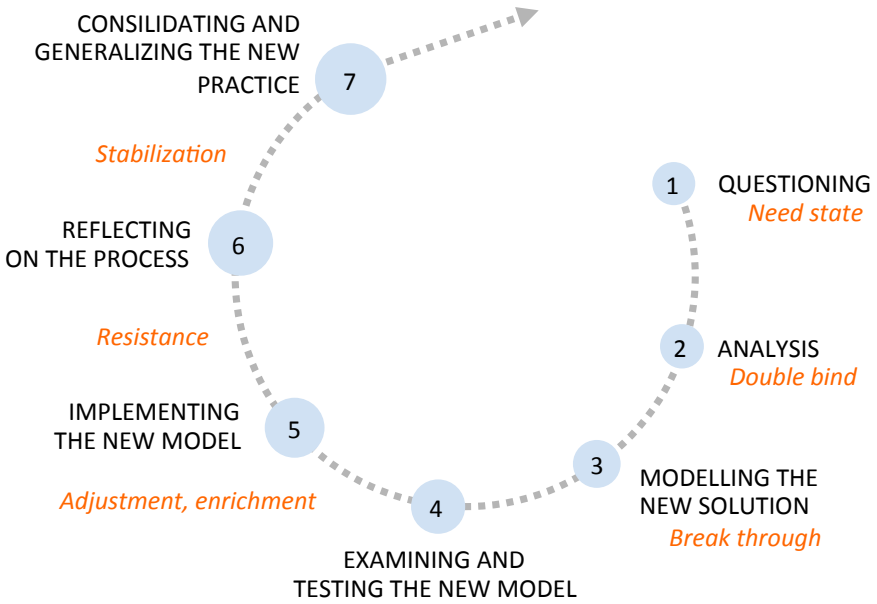


Figure 13: Reproduction of a model of expansive learning from Engeström and Sannino 2010:8

With this concept of expansive learning, Engeström widened the concept of learning and development in AT to include 'the radically new', which I think can be understood as innovation, even though Engeström never uses that word.
It can be argued that innovation has always been a latent part of activity theory because of the theory's strong focus on development in many different forms – cognitive and emotional as well as material. But with Engeström's concept of Expansive Learning, with its moving object and iterative understanding of learning, AT comes closer to being a form of innovation theory.

Engeström believes that there is a societal and historic need for a new kind of learning that Expansive Learning can meet. He lists the following three reasons for the need for expansive learning (Engeström and Sannino 2010):

1. the world's growing complexity and the less predictable future that leads to no one knowing exactly what needs to be learned;
2. the new and growing possibilities for social production and new types of activities generated by Internet; and
3. the emergence of runaway objects, defined as problems such as global warming, pandemic disease and armed conflicts.

It is possible to look at *Urgent Evoke* as a learning design that reflects and tries to respond to the needs and societal developments that Engeström outlines. *UE*'s design can be seen as an attempt to cultivate the potentials of a new social Internet-based technology in order to deal with runaway objects (wicked societal problems). This is achieved by creating an activity system where the learning is emergent and a result of the players' interaction with the design (their work on the missions and quests, their use of knowledge resources, the topics that they put on the agenda, etc.) and their communication with each other.

Engeström also emphasises the importance of communication. He refers to Bakhtin[19] when he characterises the ideal communication that should take place between the systems. It is Bakhtin's idea of 'multi-voicedness' that Engeström draws on when he says that 'expansive learning is an inherently multi-voiced process of debate, negotiation and orchestration' (Engeström and Sannino 2010: 5).

That the communication is multi-voiced does merely mean that many people raise their voices. 'Multi' also implies that not only academic or other trained voices are heard, but also a diverse set voices representing many different opinion groups. The concept of 'multi-voicedness' adds a democratic perspective to the characterisation of the communication that is part of Engeström's concept of expansive learning. I find this perspective is also implied in the World Bank's intention to empower ordinary citizens to raise their voices in the form of Evokations that express their hopes and ideas for positive social change.

Taken together, the 1st, 2nd and 3rd generations of Activity Theory provide me with an analytical framework where human tool-based activity is central for human, technical and social development. This ontological idea fits very well with the belief that games as an activity system can empower players to become post-game social innovators. Furthermore, I find in Activity Theory a dialectical, social and context-dependent understanding of learning and development that allows me to examine the interplay between the individual player, the game as a tool *and* its social community of players. These are all important elements of the *Urgent* Evoke game design. The theory also helps me conceptualise and understand how activity systems are connected in networks and how development is not only pushed by the activities in one system, but is also the result of several activity systems entering into negotiations and dialogues about a possible shared object.

This thesis builds on a social ontology where learning and development is defined as a social process. The same philosophical assumption guides the design of *Urgent Evoke,* which is constructed as a social network game whose design supports the creation of a learning community among players (see Chapters 1 and 2). Therefore, the social perspective plays a prominent role in this thesis and is included in the research question.

Theoretically, as we have just seen, the social perspective also plays an important role in AT, both in the activity system, where the player is embedded in a

[19] Russian scholar (1895-1975) working in a cross-disciplinary field of philosophy, literature critique and semiotics.

community, and in the meeting between activity systems, where a communication and negotiation of a possible shared object takes place between activity systems. But even though the social perspective plays an important role in AT, the theory does not offer a definition of what a community is. I chose to add SNA to my theoretical framework and mix of methods because it provides a way to understand and look at the player community and at the same time strengthens the social focus in my work.

Social Network Analysis

The approach of Social Network Analysis (SNA) and its understanding of social interaction contributes greatly to my research.

SNA is a way of creating and visualising data concerning social networks. Simply put, a social network is made up of a set of *actors* (e.g., individuals or organisations) connected by ties and occupying central or peripheral positions in the network depending on their number of ties. A tie is formed when a communication has taken place between the actors and something, such as knowledge, files, money, a virus or DNA is exchanged. Ties can be *weak or strong* depending on the exchange factor, and they can be *directed*, which means that the exchange that takes place between two actors can be reciprocal or one-way (Grannovetter 1973; Borgatti 2005).

A social network is tangible; it is a social construct (Borgatti 2005). For example, it is easy for most people to start drawing a picture of their social network. We could start out with our mother/father, sisters/brothers, best friends and colleagues. But at a certain point most of us would start doubting whether to include a person or not – is a friend of a friend part of our network? So, when I as a researcher work with a social network, it is I who defines the network, just as it is I who decides where the borders of the network are.

SNA is a structural approach to understanding the social world where the mapping of the network – the patterns formed by the connections and communication between actors – is seen both as an important source of information about how the social world over time has shaped certain network structures and as a predictor of coming social outcomes.

Research dealing with SNA has been increasing in a steep curve over the last 30 years in many different areas such as management, health, urban studies, economics and minority studies (Borgatti and Halgin 2011). One explanation for this increased interest can be found in the combination of the emergence and growth of social media and the tools that have become 'available to collect, analyze, visualize, and generate insights' (Hansen, Shneiderman and Smith 2011: 3) from these digital social spaces. It is not that social networks did not exist before social media; on the contrary, humans have always formed different types of connections with each other. But the number of connections has grown with the rise of social media, and new possibilities for identifying and making these connections and the patterns they form more visible have emerged (Hansen, Shneiderman and Smith 2011). Analysing the structures of the networks tells us something about how resources are allocated in the network and therefore how the structure of the

network, the position of the nodes and the nature of the ties influence the actors' possibilities, options and potentials in the social world.

A core question when working with SNA is whether one should work with network theory or theory of networks. In a paper from 2011, Borgatti and Halgin define the differences between the two:

> *Network theory refers to the mechanisms and processes that interact with network structures to yield certain outcomes for individuals and groups. In the terminology of Brass (2002), network theory is about the consequences of network variables, such as having many ties or being centrally located. In contrast, theory of networks refers to the processes that determine why networks have the structures they do – the antecedents of network properties, in Brass's terms. This includes models of who forms what kind of tie with whom, who becomes central, and what characteristics (e.g., centralization or small-worldness) the network as a whole will have.* (Borgatti and Halgin, 2011: 1)

I work with network theory, whose aim is to describe and discuss the *implications* of the structure of the network (e.g., core/periphery structure) and the positions of the nodes in the network (e.g., central position, periphery positions, boundary spanners, etc.) (Borgatti and Halgin 2011).

The SNA literature arguably contains the implication that the network variables influence the players' social capital. The idea is that the structure of the network, the positions of the nodes and the number and character of their ties influence the individual nodes' access to resources such as knowledge, money, power and recognition. I find that thinking about social structures as a source of information about the node's access to resources to be an interesting addition to my activity theoretical analysis of *Urgent Evoke*, and thus to the overall aim of the thesis.

Mixing Social Network Analysis and Activity Theory – a preliminary methodological discussion

Over the years, SNA has been dismissed as a simple methodology that is as redundant as old wine in a new bottle. This critique has been refuted by pointing to the development of SNA from being merely a metaphor to, if not a theory, then at least an important new approach to social inquiry where the uncovering of the structures of a social phenomenon is central (Wellman 1997).

> *The most significant substantive achievements of structural analysis have been to pose new intellectual questions, collect new types of evidence, and provide new ways to describe and analyse social structures.* (Wellman 1997: 47)

The quarrels about whether SNA should be defined as a theory or a method are important on an intellectual level, of course. But they also have implications on a practical level that make it difficult to decide where to place the discussion of SNA in the overall structure of the thesis and force me to engage in a preliminary methodological discussion. I argue that SNA is not a fully developed theory. It is a method built on a structural epistemology and a set of theoretical ideas about the

social consequences of the number, form and character of our social ties and the patterns they create. Having said this, I have still decided to place the discussion of SNA in sequence with my discussion of Activity Theory. I do so because I use SNA as an add-on to AT, while I let SNA challenge the original concepts used in AT.

AT operates with seven basic elements (subject, goal, object, etc.) as we learned in the beginning of this chapter. These elements are not very clearly defined, which makes it possible to use other theories to create more narrow definitions that can strengthen a certain focus in AT. When I choose to use SNA to strengthen the focus on the implications of the social interaction between the players, I create a certain, more specific understanding of the concepts 'community' and 'division of labour' in AT.

With the use of SNA, the community of *Urgent Evoke* becomes more narrowly defined as a social network, and the concept of 'division of labour' should perhaps be relabelled 'division of positions' because what is analysed is not how the individual players participate in the enactment of the game activities, but how their positions and connections create certain structures and enable certain flows and exchanges of resources. By cobbling AT and SNA together, I also attempt to cobble discussions of human leaning and development with discussions of access to resources.

Using AT allows me to look at how the players' experiences of the game design (e.g., narrative, mission and quests) enable a form of empowerment as the players goes through a process of personal and cognitive development in the form of new knowledge, skills, a greater self-confidence or a feeling of civil obligation. Using SNA allows me to see the structure of the network formed during the game and analyse how this structure helps empower the players by providing them with access to resources. In other words, the AT lens makes it is possible to see *Urgent Evoke* as an *object-producing* (generating a social innovative idea), *subject-producing* (the player should start to see herself as a social innovator) and *activity-producing* (create an Evokation that describes what to do next) activity. By adding a SNA lens, it becomes possible to also understand *Urgent Evoke* as a *social capital*-producing activity.

However, my cobbling of AT and SNA is not without problems. While a SNA analysis is a structural approach to social inquiry, AT is a systemic one. This means that while SNA looks at networks in terms of structure, the nodes' positions, type of ties and the flow of resources through the network in a very mathematical way, AT tries to sketch complex interrelations and dialectical relationships between the system's parts as well as the context. My introduction of SNA into the analysis should therefore not be understood, as an attempt to merge two theoretical takes. Rather, it is an attempt to add a lens to my theoretical glasses that allows me to look at my object in a different way, and thereby add to the complex description of the phenomenon that I try to understand. This epistemological stance will be unfolded in more detail when I discuss my methodology later in this chapter.

Social Network Analysis and social capital

The SNA research literature discusses different structures, positions and types of ties in relation to social capital. In the following section, I introduce a selection of

these discussions that I find relevant to how I use SNA in my analysis of *Urgent Evoke*. I have chosen discussions that deal with the overall structure of the network as well as the individual nodes' positions within the network. The reason for this is that the social network data I have been able to create puts a limit on what kind of analysis I am able to make. For example, the data created do not enable an analysis of how strong a tie is between players or whether it is directed (directedness).

As a point of departure, I use a very central discussion about the implications of the network structure; to be more precise I look at the discussion connected to what is known as a core/periphery structure. A core/periphery structure is a common network structure where the network shows a densely knit core and a more dispersed periphery (Borgatti and Everett 2000; Cattani and Ferriani 2008).

Core/periphery structures can be recognised on different levels in the social network. This means that I can be looking for and at the structure in the overall network (macro-level), in sub-networks (meso-level) and in ego-networks (micro-level). In the discussion of the implications of the core/periphery structure on the social capital of the nodes in the network, one dominant idea in the literature has been that it is advantageous to hold a central position as an effect of having many direct ties to other nodes in the network. This position is associated with having a high degree of access to the resources of other nodes, e.g., their ideas, experiences or time. Besides having access to resources, a central position is also associated with being able to influence when and where things flow in the network.
For example, a central node can retain information from other nodes, and resources such as new knowledge will often reach the central nodes before they reach others, which provide central nodes with a cutting edge and the means to innovate (Freeman 1979; Borgatti and Everett 2000).

An analysis of *Urgent Evoke* from this perspective would make it relevant to look at the structure of the overall network as well as its sub-networks to identify whether they have a core periphery structure and whether the winners hold more central or peripheral positions in such a structure. This means that it is relevant to calculate what is called the 'centrality degree', which is a number that tells how many direct ties a node has to other nodes in the network. A high centrality number indicates that a node has a central position in the sense described above.

But the idea in the SNA literature that a central position is the most advantageous position has been challenged in different ways; several other positions have been suggested in order to yield equally interesting advantages when it comes to mobilising different forms of resources.

Dahlander and Frederiksen (2012) explore how a *peripheral position* can be advantageous if the individual holding the position has ties to other networks that would enable her to access and bring in resources from other networks. The idea is that in a network without ties to other networks, the resources will at a certain moment dry up. For example, if new knowledge is never brought into a network, the same ideas will keep on flowing in the network and make it difficult for the network or the node to be innovative. It is therefore valuable for a network to be connected to other networks where other and new resources flow. Dahlander and Frederiksen use the term 'cosmopolitan' to identify a node that holds a peripheral

position and is capable of travelling between networks, picking up and disseminating new ideas and knowledge as they move around. Dahlander and Frederiksen demonstrate that a cosmopolitan can be considered an advantage because it has access to resources that other nodes in the network do not have yet, and they decide when, if at all, to bring those resources into the network.

Cattani and Ferriani (2008) have shown that there are also advantages to having an *intermediary* position between the core and the periphery inside a network. They argue that being an intermediary is linked to having access to a variety of new ideas and knowledge via the periphery while at the same time having close ties with the core of the network. This strengthens the opportunity to get support and endorsement for one's ideas. In this sense, the intermediary gets the best of both worlds.

There is an overlap between Dahlander and Frederiksen and Cattani and Ferriani. Both point to the advantages of being in-between – Cattani and Ferriani with their intra-network perspective and Dahlander and Frederiksen with their inter-network perspective. Thus, it serves my research interests to calculate what is called the 'betweenness-centrality' (Freeman 1977) of the players of *Urgent Evoke*.

But the idea that centrality is the most important indicator of a node's access to ressources has been challenged both by researchers suggesting other positions to be equalliy as advantageous and by researchers focussing on the implications of the character of a node's ties and the structure of her network.

In 1973, Granovetter wrote about *the strength of weak ties,* and in 1995, Burt introduced the idea of *structural holes*. Common for both scholars is the idea that having links to other networks, *a bridging tie*, could provide a node with new and unique knowledge not already present in the network. This knowledge can stimulate innovation and provide the node with an advantage because of the uniqueness of the new knowledge.

Central to Granovetter's idea is that having strong ties reduces a node's access to new and different resources. A strong tie is formed when there is a reciprocity between the nodes and the exchange of resources between the nodes are frequent. He argues that a strong tie between A and B predicts an overlap between the networks of the two nodes, because if A is closely connected to B, A will probably have at least a weak tie to B's other connections. He also argues that because we tend to have strong ties with people who are similar to us, there is also a good chance that A is in some ways similar to B's other connections with whom she has strong ties. The risk in such an environment is that the innovation capacity of the network and the involved nodes is hampered because the same knowledge and ideas keep circulating between the nodes.

Granovetter is looking for a way to get new knowledge into the network; he argues that a possible way to do this is for node A to have a weak 'bridging' tie to another network. He defines a bridging tie as a unique tie between two networks that allows A and C (the node A connects to in the other network) to share knowledge that is new and unique to their respective 'home' networks. Granovetter claims that a bridging tie is always weak, because a strong tie would predict that others in A's

network would have ties to C as well (Granovetter 1973).

Burt's idea about structural holes is very similar to Granovetter's. Burt argues that when nodes A and B have the same amount of ties with the same strength, but all of A's ties are connected to each other, whereas those of B are spread out in several different networks and are not connected, then B is better equipped to be innovative because she has better access to different types resources (e.g., knowledge and ideas flowing in different networks) and she is able to synthesise, or as Burt also calls it – 'to brokerage' (Burt 1995: 354) – these ideas and thereby create new ones:

> *The argument is that opinion and behaviour are more homogeneous within than between groups, so people connected across groups are more familiar with alternative ways of thinking and behaving, which gives them more options to select from and synthesize. New ideas emerge from selection and synthesis across the structural holes between groups.* (Burt 1995: 349–350)

While Granovetter focuses on the strength or weakness of the ties and uses the term 'bridging', Burt focuses on the (structural) holes between networks and uses the term 'brokerage'. Together the two gentlemen open up for discussing another way of thinking about centrality. Instead of counting the number of ties a node has, they direct our attention to the networks of the connections of a node. Bridging networks or brokering is advantageous when the nodes one connects to are members of resourceful networks. This form of looking at and calculating centrality is called 'eigenvector centrality'.

The ideas of Granovetter's and Burt's ideas are very much in line and in certain ways overlap with the researcher introduced above who discusses the influence of the nodes' positions in a network. But their focus is still somewhat different in the sense that they direct our attention to the character and the quality of the ties themselves.

These discussions exemplify the kind of analytical questions SNA's structural theoretical approach generates. Using SNA enables me to see the community in AT as a structure and relate the understanding of the division of labour to a discussion of the position of the players in a network structure. Reading the literature convinces me that the point of using SNA in connection to *Urgent Evoke* is not to show how *one* position has been 'the most advantageous'. The literature suggests that different positions bring different possible advantages. Instead, the aim must be to visualise the patterns that the communication between the players have formed and analyse how the structure and players' (probably) different positions in the structure have supported their empowerment process and given them access to many different forms of resources, including information, knowledge and ideas, social recognition and acknowledgement.

In the following section, my methodological stance and my choice of methods are unfolded and discussed.

Chapter four

METHODOLOGY & METHODS

> 'Tell me one last thing ', said Harry. 'Is this real? Or has this been happening inside my head?' Dumbledore beamed at him, and his voice sounded loud and strong in Harry's ears even though the bright mist was descending again, obscuring his figure. 'Of course it is happening inside your head, Harry, but why on earth should that mean that it is not real?'
>
> -J.K. Rowling, *Harry Potter and the Deathly Hallows*

> 'Struggles over what count as rational accounts of the world are struggles over *how* to see'.
>
> -Donna Haraway

My research process developed differently from what I had imagined. When I began my research, I thought that this chapter would tell the story of how I had faithfully followed a well-designed research plan from the beginning to the end of my project. The truth is that there was never one such plan. There were several: the original plan kept changing as my research evolved from an open, explorative and emergent study (Morgan 2008, Stebbins 2008) to a mixed-method research project. But even though the plan changed, my research was continuously guided by a long-held interest in understanding how technologies can empower ordinary people to become socio-political change agents.

This knowledge interest has formed a common thread through a messy process of movements between fruitful ideas and dead-ends, between confidence and doubt, between openings and closings. Movements guided by philosophical assumptions, previous learning, curiosity, intuition, theoretical realisations and empirical findings. And as I moved about, epistemological, ontological and methodological threads were woven. It is these threads that I try disentangle and discuss now.

I begin with an account of the philosophical assumptions that form the background of this study and guided the methodological choices I made. I then describe my methodological approach in order to move on to an account for the methods applied.

The philosophical assumptions

My research is epistemologically placed in a field between technology studies, humanities and the social sciences because I am interested in analysing and conceptualising how communication *technologies* can help facilitate *human learning* and *development* that can lead to citizen-driven positive *social change*. The central question of the thesis is: *How did the interplay between the design of* Urgent Evoke *and the players' use and sense-making of the game create openings for an empowerment process that helped the winners become post-game social innovators?*

I have chosen to look at this question through the theoretical lenses of Activity Theory and Social Network Theory. In the following, I describe the philosophical assumptions that my knowledge interest and theoretical perspective bring with them, as these assumptions form the philosophical backbone of this study and have shaped my research strategy.

Dialectical

This study builds on the assumption that human learning and societal development is the result of a dialectical relationship between humans and technology. In the human-technology relationship, the subject is the partner with the agency, but that does not mean that the technology is a neutral tool. Technological design is understood as an expression of historically accumulated human knowledge and development made with the intention of enabling certain activities in a certain way. The possibilities and limits of the design mediate the subject's interaction with and interpretation of the world, and the technology thereby shapes human development. However, even though the design affords certain activities and mediates human experience, it does not *determine* the activities or the experience, as there is always room for human agency and the use of the technology in unintended ways. The dialectical ontology entails a methodology in which it is possible to focus both on the technology and the subject as separate entities that bring with them different histories, intentions, and resources, and to establish a picture of the interplay between the two.

Systemic

The dialectical understanding of the human-technology relationship is embedded in a systemic ontology where the elements constituting the system (in this case technology, subject, object/goal, rules, community and division of labour) deserve individual methodological and analytical attention, but only in order to support an analysis of the complex relations and interplay between the parts examined. In line with Engeström's 3GAT, I operate from a multi-systemic perspective, where the activity system is analysed in its own right, but the relationship – the communication and transfer of resources (ideas, knowledge, power, etc.) – between systems is also ascribed importance. Methodologically, the multi-systemic perspective asks that attention be paid to the development that takes place in the activity system as well as between or in the movement between different synthetic as well as physical systems.

Constructivist

The dialectical ontology brings with it a constructivist understanding of knowledge, as all human experience, learning and development is seen as the result of human interaction with the world mediated by technologies. In this understanding, it is not possible to have a 'pure' experience of the world: our experience will always be shaped by the technologies that we use and the way we use them. In Activity Theory, technologies carry certain design intentions that enable human activity and learning. But the assumption is that it is the subject that has the lead in the interaction.

Technology is in this optic an enabler and facilitator. But it is neither the determinant of the learning process nor an equal actor in the human-technology relationship. Because the subject takes the leading role, the interpretation of the

human-technology relationship cannot be mono-phonic. It must be multi-voiced because the meaning of the technology is dependent on how it is used, i.e., on the resources, motivations and goals of the subject using it. Methodologically, this epistemological stance means that my aim is not to 'reveal the true nature' of *Urgent Evoke* or G4C games in general, but to create a rich phenomenological description of *UE* that allows for multiple voices to express why, how and with what results do they play *Urgent Evoke*.

This constructivist understanding of knowledge not only applies to my understanding of the knowledge produced in *Urgent Evoke*. It also applies to the knowledge produced in this thesis. In my work, I am inspired by researchers like Flyvbjerg (2001 and 2006) and Law and Urry (2004,) who argue that the point of social research is to contribute to:

> *society's practical rationality by elucidating where we are, where we want to go, and what is desirable according to different sets of values and interests.* (Flyvbjerg 2006: 42)
>
> And that:
>
> […] *social inquiry and its methods are productive: they (help to) make social realities and social worlds. They do not simply describe the world as it is, but also enact it* […] social science should therefore be seen as a *'business of "ontological politics*"'. (Law and Urry 2004: 390-391)

I can to a large extent mirror my own approach to research found in Flyvbjerg's and Law's and Urry's constructivist politicised understanding of knowledge. In this understanding researchers do not produce the 'truth': they produce interpretations and judgments of the social world. By doing so they constitute what and how we see the social world, and thereby influence public discussions. Flyvbjerg (2006) relates this approach to research of Aristotle's concept of a phronetic kind of knowledge, but I argue that the kinds of interpretations and judgements that I make in this thesis also relate to the concept of *techne*, the knowledge form linked with praxis and know how, with art, design and craftsmanship and with the iterative construction of mock-ups as a way to develop new insights. When I associate my work with *techne,* it is not because I intend to create an *Evoke* 2.0. It is to produce knowledge that can not only inform and feed public socio-political deliberations about games as a socio-political tool, but also knowledge that can suggest *how to* design future games that can enable citizen-driven social innovation.

Social

This thesis is based on a social ontology where learning and development is defined as a social process. Activity Theory belongs among the social learning theories, which Brandi and Elkjaer describes in the following way:

> *All social learning theory departs from an understanding of learning as participation in social process emphasizing both issues of knowing and issues of being and becoming. This means that social learning theory encompasses both the epistemology and the ontology of learning. Thus, social learning theory*

> *considers both the issue of human existence, development, and socialization (ontology) and the issue of people coming to know about themselves and what it means to be part of the world (epistemology). In social learning theory, socialization and learning are, in other words, inseparable process; and they constitute each other in an understanding of learning as participation in social processes.* (Brandi and Elkjaer 2011)

Using this understanding of learning allows us to discuss how *Urgent Evoke* influences not only the players' knowledge about social innovation, but also how it helps them *become* social innovators. This means that apart from looking at the relationship between the subject and the technology, the study is also meant to account for the community of players, their relationships, the division of labour among them and the role of the technology in the development of the network.

I describe my epistemological base as a constructivist approach to knowledge where the goal is to produce both a phronetic and a technical type of knowledge in order to point out both where we are, where we should go and *how* to get there.

Mixed Methods - a methodological stance

I have described my ontological and epistemological base as dialectical, systemic, constructivist and social. In the following section, I explain how this point of departure influences the methodological choices made. A mixed method research design is applied in this project in the form of an in-depth single case study based on a document study, in-game observations, online and face-to-face interviews as well as social network analysis. The specific methods applied will be discussed later, but first I focus on the overarching methodology.

To explain my understanding of mixed method research (MMR), I draw on Clark's and Creswell's definition:

> *Mixed methods research is a research design with philosophical assumptions as well as methods of inquiry. As a methodology, it involves philosophical assumptions that guide the direction of the collection and analysis and the mixture of qualitative and quantitative approaches in many phases of the research process. As a method, it focuses on collecting, analysing, and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches, in combination, provides a better understanding of research problems than either approach alone.* (Clark and Creswell 2007: 5)

Clark's and Creswell's definition of MMR is not the only one. Many others (Johnson et al. 2007) have originated from researchers working in a variety of fields such as education, evaluation and public health (Denzin 2012). I work with Clark's and Creswell's definition because they define mixed methods not only as a method but also as a methodology with its own philosophical assumptions.

The philosophical positioning of MMR is often related to what is called the '*paradigm war'* of the 1980s, even though the mixing of methods was performed by researchers long before the 'war' began (Johnson et al. 2007; Pearce 2012). In the

context of the paradigm war's fight about whether qualitative or quantitative research is the most righteous way to produce scientific knowledge, MMR's attempt to mix qualitative and quantitative approaches stands out as the pragmatic middle way that could restore peace, a position that has granted MMR the nickname 'the third paradigm'. But MMR has other nicknames too, such as 'methodological pluralism' (Schrøder 2012) or 'methodological polytheism' (Bourdieu 2004), names that refer to MMR's ontological and epistemological foundation. The ontological starting point for MMR researchers, including me, is that it is impossible to capture *one* 'true' social reality. Because the social world only shows itself to us through representations or interpretations, and because no one experiences or interprets things in the same way, we have to operate with a concept of reality that is pluralistic (Denzin 2012; Pearce 2012; Greene 2012).

The epistemological consequence of this pluralism is that the knowledge we have about the social world should itself be seen as an interpretation, i.e., a construction, or one story among several possible. In such a constructivist ontological and epistemological framework, the aim of the researcher is not to produce 'truth', but to bring 'breadth complexity, richness, and depth to any inquiry' (Denzin 2012: 82). Such an imperative calls for a methodology that makes room for multiple voices, differences and dialogue. The methodology does not try to reduce complexity by ruling out certain types of methods or data *a priori*, but tries to move between paradigms and mix different approaches in order to produce new perspectives on and reflections about the social world.

The attempt here is not to say that mixing methods is without complications, but to move the discussion away from the terms quantitative and qualitative because they only '[…] denote kinds of data, not the epistemologies, methodologies, designs, and ontological assumptions that are associated with different research frameworks'. (Mertens 2012: 255). In other words, instead of discussing whether the methods used produce qualitative or quantitative data, we should discuss why we are crossing the borders between the different paradigms, epistemologies and ontologies that the chosen methods relate to, and what implications the crossing brings with it.

Some MMR researchers see the qualitative-quantitative dichotomy as a social construct (Pearce 2012) that can and should be deconstructed in order to inflate the power of the discourse and thereby open up more ways of doing research. After all, science has a role to play in contributing to the resolution of the world's wicked problems (Mertens 2012; Denzin 2012). Because wicked problems are complex, fluid, multi-contextual phenomena, we are prompted to dare to cross the artificial divisions we have created among scientific fields, types of knowledge and methodologies, and start mixing methods. We mix in order to create new interpretations of the world and open up new solutions to the problems we face.

To summarise why a MMR methodology is applied here, I would like to cite Denzin's description of the MMR researcher as a *bricoleur*:

> *The researcher-as-bricoleur-theorist works between and within competing and overlapping perspectives and paradigms. […] The product of the […]*

> *bricoleur's labor is a complex, quilt-like bricolage, a reflexive collage or montage, a set of fluid, interconnected images and representations. This interpretive structure is like a quilt, a performance text, a sequence of representations connecting the parts to the whole.* (Denzin 2012: 85)

Even though I have exercised several historical and political imperatives for doing mixed method research, there is still no doubt that MMR with its pluralistic and political ontology raises questions about the validity of the research results produced. The MMR community has produced two different responses to the critique, both of which relate to the idea of triangulation. The first response, attributed to what is called the *pragmatic* stance within MMR, is to construct a research design where a mix of both qualitative and quantitative methods are applied sequentially and where the different results are compared in order to find similarities and overlaps that can support a common conclusion. Validity is here based on the same result being confirmed in several findings based on different methods (Mertens 2012; Denzin 2012). In this approach, a positivistic ideal of being able to quantify and generalise is pursued. The second response, produced by the so-called *transformative* stance in MMR, is that the pluralistic constructivist ontology of MMR makes it irrelevant to talk about validation of data (understood as the production of an unambiguous and cohesive data set), and that triangulation should therefore be seen as an alternative to validation:

> *Triangulation is not a tool or a strategy of validation but an alternative to validation (Flick, 2007). The combination of multiple methodological practices, empirical materials, perspectives, and observers in a single study is best understood as a strategy that adds rigor, breadth complexity, richness, and depth to any inquiry.* (Denzin 2012: 82)

I support the argument of the transformative camp because I believe that in order to enable science to help solve the wicked problems of our time, we need methodological development. We need to cross the socially constructed borders between research fields and paradigms in order to see the world from a new perspective.

In the following section, I discuss why I chose to make an in-depth single case study and how my knowledge interest and theoretical lens have caused me create the focus of the study.

An in-depth single case study

Working with mixed methods can be done in different ways. I chose to conduct an in-depth single case study because the G4C games that I am interested in are relatively new and few (although their numbers are growing). *Urgent Evoke* stood out among the G4C games – and still stands out – as a state-of-the-art example of a phenomenon that had not yet been explored or described in great detail.

Urgent Evoke caught my attention for several reasons. First, the game was commissioned by the World Bank, one of the oldest, most powerful international

political organisations.[20] This meant that the game and its players were placed in the epicenter of socio-political discussions in the physical world from the beginnings of the game. Second, *Urgent Evoke* not only informed players about social political issues, it was committed to actively involving players in these issues and empowering them to become post-game social innovators. Third, *Urgent Evoke*'s game design, unlike other games, contained conscious attempts to support the transfer of ideas developed in the game to the physical world. Furthermore, the research on G4C games is scarce and as Bent Flyvbjerg says, repeating an insight of Thomas Kuhn:

> […] *a discipline without a large number of thoroughly executed case studies is a discipline without systematic production of exemplars, and that a discipline without exemplars is an ineffective one.* (Flyvbjerg 2006: 242)

The aim of this study is not to construct theories or make generalisations, but to produce a rich context-dependent description of *Urgent Evoke*, provide a first-hand understanding of a new real-life phenomenon and help depict the complexity and nuances of the relationship between the game and its players (Yin 2009). One of the challenges of working with a case study that should produce a complex and nuanced picture of a phenomenon is to decide how deeply and widely to dig. Every methodological choice made also seems like a reduction of the complexity that one tries to depict. I have chosen to focus in my study on the winners of *Urgent Evoke*, their sense-making of the game and the social network they build during the game. The choice of these three focal points are explained below:

Methods of openings

As stated in the beginning of this chapter, this thesis is part of a continuous pursuit to identify, understand, improve and develop technologies that can enable citizen-driven social innovation. Based on the current state of this pursuit, I am inspired by Maria Bakardjieva's approach to research on social media, which she refers to as a 'method of openings' (Bakardjieva 2012). This is not a well-defined method that describes how to do research; it is more a methodological position taken by the researcher herself where the aim is '*to investigate what it is possible to achieve with new media in the terrain of citizenship rather than to present a statistically measured account of what is real*' (Bakardjieva 2012:1357).

Bakardjieva argues that looking for what is and could be made possible by new media, i.e., looking for the strengths, successes and accomplishments, deserves just as much scientific attention as the hindrances, weaknesses, failures and problems. Looking for openings is not the equivalent of being uncritical, blind or immune to the importance of research on issues like surveillance and privacy online or questions relating to the working conditions or the ownership of the production means in cyberspace. Acknowledging that such research is needed does not mean that every research project dealing with the Internet and social media has to take critical theory as its point of departure. If we want to act on the existing and growing critique that highlights where the Internet and social media go wrong,

[20] Most G4C games are financed by smaller non-governmental organizations, foundations and interest groups. http://www.gamesforchange.org.

we also need to know what it takes to get it right.

I choose to walk in Maria Bakardjieva's footsteps and look for the openings for democratic development, empowerment, learning and bottom-up social change created by new media such as digital games. I thought that the best place to begin my search for openings was among the players who are still active in an *Urgent Evoke* Facebook group, and later among the winners of the game. The reason I began my research among the players still active on Facebook – besides the fact that Facebook provided me with the means to initiate such contact – was that the on-going contact among the members of the group indicated that the game had the capacity to generate a social network among the players that was strong enough to transcend the activity system of the game. I saw this as an opening for empowerment of the players.

Later, I chose to narrow my focus even more and zoom in on the winners because their winner status indicates that they have been able to use the game in ways that have created openings for their development as post-game social innovators. I do not mean to imply with my focus that playing the game could not have had an equally positive impact on players who did not win or who are not members of the Facebook group; it came down to the fact that I would not know how to identify these players post-game.

Besides influencing my approach to my case, Bakardjieva's methods of openings also influences my analysis, interpretation and conclusion, as I will be looking more for the possibilities for citizen-driven bottom-up social change created by *UE*, rather than the hindrances.

Sense-making methodology

I also draw on what Brenda Derwin calls her 'Sense-Making Methodology' (SMM). SMM has been used by researchers in many different fields and contexts, but is renowned for its impact on library and information science (Derwin 2008). It is an attempt to construct a coherent methodology that includes every step, beginning with the formulation of research questions, in order to draw conclusions. I have not used SMM rigidly throughout my entire research process, but have chosen to draw on the methodology in part of my empirical work. My reasons are two-fold: first, I think SMM links communication, human and societal development in a way that fits my epistemological position. Second, Derwin's very concrete guidelines on how to construct a research interview has helped me create empirical material concerned with how a communication technology such as a game can help facilitate human development. I discuss these concrete guidelines in more detail later in this Chapter.

Derwin's SMM is focused on how people move through time and space, bringing with them their history, experience, horizons, habits and skills. The methodology carries with it a *systemic perspective*: the lives of the research subjects are seen as framed by a context of organisational systems and procedures, domain knowledge systems, cultures and communities, all with certain power structures and social

dynamics. In the meeting between the personal situation and the structural context, the subject, or as Brenda Dervin calls it, the sense-maker, meets gaps, defined as questions, confusions, muddles, riddles, etc. Dervin sees these gaps as a given part of life and as the drivers of human development because it is in the attempt to bridge the gaps that we develop as human beings. Bridges for Dervin consist of ideas, intuitions, memories and narratives that the sense-maker creates in the bridge-building process. The bridge-building/sense-making process is based on the sense-maker's access to and use of different forms of information resources produced/provided by different sources such as the media, institutions or other people. This process leads to an outcome (e.g., the gap is bridged), but because the sense-maker's cognitions, attitudes, beliefs, values and emotions have developed during the bridge-building process, the sense-maker will be facing new gaps and the process of bridge-building will repeat itself.

It is fruitful to use the SMM in combination with Activity Theory because the two share some fundamental philosophical assumptions that form the backbone of this project. I see a parallel in Derwin's concept of the sense-maker and the sense-maker's continuous complex praxis of using communication actively in her bridge-building with AT's assumption that human development is the result of an active interaction with the world mediated by technologies. Furthermore, I argue that SMM shares AT's *dialectical* perspective on human development and sees development as an interplay between the socio-political context, the subject and 'technology'. In AT, as in SMM, it is the subject that is the actor, who is actively engaged in the world, but this activity always includes the use of 'technology'. And it is the affordances of the 'technology' that mediate the subject's interaction with the world, or as Derwin would say, enables the sense-maker to build a bridge. I put 'technology' in quotation marks here because SMM does not operate with the concept of technology; instead, Derwin talks about communication as a possible help or hindrance in the sense-makers' bridge-building process.

Communication for Derwin shapes the sense-makers' ideas, cognitions, beliefs, values, feelings, memories and narratives. But it can also be part of creating the gaps (e.g. questions, confusions and riddles) that the sense-maker faces. Derwin does not define communication as a technology, but I think her understanding of communication can be included in AT's broad understanding of technologies as mediating artefacts. But combining AT and SMM means that I have to operate with a concept of technology that is more narrowly defined as the communication tools and expressions available to the sense-maker.

Without going into an account of the historical development of communication models, I think it is fair to say that Brenda Derwin breaks with classical communication models that operate with a sender, a message, a receiver and perhaps some kind of noise that can disturb the sending process and hinder the receiver from receiving the messages as intended. In Brenda Derwin's approach to communication, the sense-maker is central. She is not a receiver, but an individual situated in a complex and puzzling world where she tries to bridge the gaps she meets by drawing on different means of communication available to her. For Derwin, communication becomes the building stone in a development process led by the sense-maker; it is through the sense-maker's judgement and the use of the

communication that communication products get their meaning and value. In that sense, Derwin's methodology draws on a *constructivist ontology* that acknowledges human development and communication as a result of the sense-maker's active process of constructing a bridge. Working with SMM therefore allows me to create a complex, pluralistic and multi-voiced dataset filled with distinct accounts of the meaning of the dialectical relationship between the communication technology and the sense-maker.

To sum up, the social ontology of this thesis demands that I focus my empirical work not only on the individual player's process of sense-making, but also find a way to include the social and communitarian aspect of the game. This I have done by adding a social network theory perspective to my methodology. This addition is meant to allow for an empirical and analytical movement between the sense-maker's individual account for his or her bridge construction process and an overall structural mapping of the social network of the players.

So far, I have accounted for the ontological and epistemological foundation of this project. I have sought to show how my philosophical starting point is reflected in my methodology and how my theoretical framework is built on certain methodological assumptions infused with the methods of opening and the SMM. The next step is to take a closer look at the methods included in my mix. I begin by looking at the mix and explaining how I think the methods represent different perspectives on *Urgent Evoke* and contribute to the aim of generating a multi-voiced and complex research material. Finally, I discuss the methods individually and pinpoint their strength and weakness.

Methods

The mix

My mix of methods consists of non-participatory observations made on the site of *Urgent Evoke* after the game ended, a document analysis of an evaluation of *UE* conducted by the Natoma Group for the World Bank and open and semi-structured qualitative e-mail interviews. It also includes Skype and face-to-face interviews with players and winners of *UE,* an interview with Robert Hawkins, Senior Advisor at the World Bank and Executive Producer of *Urgent Evoke* and a social network analysis of the *UE* players' in-game social network. My mix also consists of qualitative and quantitative data that represent different ways of looking at the same phenomenon and different voices.

The observations made in *Urgent Evoke* began before all other research activities made in relation to the game were conducted. I think of these first encounters as a kind of archaeological work. I was walking around on the site, and digging into the material left by the players. I was getting a feel for the place and for the activities that had played out on the site, and I began to build theories about what kind of life had been lived there.

The analysis of the evaluation made by a consultancy company for the World Bank reflected both the World Bank's intentions with the game and another party's interpretation and judgement of the game. This analysis provided me with a lot of background information, statistics on the game and its players and quotes from the

players. But most importantly, I was looking at the game through the eyes of another outsider. My *interview* with Robert Hawkins allowed me to get an insight into the organisation and the ideas behind the game. The interview took place at the World Bank offices in Washington, D. C, and also allowed me to touch upon some of the structural difficulties of developing a game like *Urgent Evoke* in an organisation like the World Bank.

The *interviews* with the former players still active on Facebook provided me with stories from different types of players – winners as well as non-winners – which allowed me to begin to understand the different motivations for playing the game and how the game has affected the players in different ways.
The social network analysis was a way to zoom out again in order to get a depersonalised, visual and structural overview.

Together, these different types of data influenced a continuous process of shaping and reshaping my research question until I was ready to fix my focus and conduct the interviews with the winners. I see this point of my research as the place where my bricolage work came together. I was drawing on all the data produced to date and finishing a long exploration of how a game can empower player to become social innovators.

The following section is a discussion of the different methods I used.

Non-Participant Observations
Because 'a case study should take place in the natural setting' (Yin 2009), one of the first things I did was to create an account on *Urgent Evoke* and make in-game observations. Of course, it would have been optimal if I had been able to make my observations from the day the game was launched and progressed. But when I discovered *Urgent Evoke,* the game had already finished and most players had left the site. As noted earlier, I was entering what could be seen as a digital historical site, much like an archaeologist. Even if I had wanted to, I was not able to perform any participant observation. But I was able to explore the game design: the structure, the interface, the graphics, the missions and quests, the external resources and the information provided by the game developers to the players.
I could also access most of the players' personal 'in-game' pages where they talked about themselves, showcased their work on the game's missions and quests and received feedback from other players. Furthermore, all the communication between players (on occasions involving the game developers/runners) who used the game's different chat forums was also available to me. While the fixed state of the game meant that I did not need to worry about catching developments or influencing events, I was not able to witness the life of the game as it evolved.

To guide my observations I drew on Lars Konzack's method for computer game analysis (Konzack 2002). This method consists of seven layers: hardware, program code, functionality, gameplay, meaning, referentiality and socio-culture. Not all layers have been included here, nor did they play an evenly strong role in my observations. But the method provided me an all-round approach to looking at *Urgent Evoke* as both a cultural and a technological artefact. Konzack's method is very structural, which helped me focus my observations and produce the data that

I used in my presentation and analysis of the game's functionalities, game play and meaning in Chapters 1 and 2.

Making observations is not only about producing data that can be presented to others (screen dumps, quotes, etc.). It is also about experiencing the game and sensing its atmosphere, something that can only be done if one steps into the space where all the different layers that Konzack treats separately are present in the chaotic totality that constitutes the game. An important part of making observations is about experiencing and sensing the *genius loci* of the space (Norberg-Schulz 1980 and 2000). While difficult to record and to communicate to others, the *genus loci* is nevertheless an important source of information that influenced my interview questions in subtle ways and provided me with a resonance when players were later talking about their experiences. Even though most of my observations were made at the beginning of my project, I returned to the site regularly during my entire research period to check out details, but also to reconnect with the spirit of the game.

Document Analysis

> *As a research method, document analysis is particularly applicable to qualitative case studies—intensive studies producing rich descriptions of a single phenomenon, event, organisation, or program.* (Bowen 2009)

My document analysis concerns one document: the evaluation of *Urgent Evoke* commissioned by the World Bank and executed by the Natoma Group. I did not plan to conduct a document analysis, but the document was offered to me after I had made contact with Robert Hawkins and discussed with him my interest in using *Urgent Evoke* as my case study. The evaluation provided me with background information on the game: the World Bank's goals for the game, the number of players, statistics about the player's participation in and interaction with the game and their demographics. The evaluation also contained the reporting on and interpretation of data from a survey conducted among 518 players at the end of the game and 14 interviews with selected players, game runners and teachers. The document also contained the Natoma Group's recommendations for future developments of the game.

The Natoma Group's evaluation is very well written and comes across as a thoroughly executed and critical evaluation. But it is important to remember that the document is not a scientific document intended for the outside world. It is primarily a strategic document intended for internal use and for discussion with partners about the game's future. That said, the evaluation gave me my first insight into the background of *UE* and the Bank's intentions with the game, and was my first meeting with the 'voices' of the players and their opinions about the game. Furthermore, the evaluation also represented an outsider's judgement and interpretation of the game – like me, the Natoma Group was not involved in the development of the game: it was trying to make sense of the game as an outsider. Together with my observations in the game, the document afforded me with context and a broad foundation for further investigations.

Interviews
Three types of interviews were conducted in this study: one off-line face-to-face interview, 12 online face-to-face interviews made via Skype and 10 e-mail interviews. These different interviews were conducted at different stages in the project and were based on different guidelines. A discussion of the different forms of interviewing follows:

Email interview: Not much has been written about the email interview method, even though the growth of qualitative research in information and communication technologies (ICT) has opened up new opportunities for researchers to examine how traditional research methods can be adopted for effective online research (James 2007). I elaborate here on the effects of using e-mail interviewing as a qualitative research method.

I used email interviews both in the opening phase of the project, when I needed to explore the many facets of the game, and later on when I had become more fixed in my research focus. I conducted 10 interviews via emails with both winning and losing UE players.

I chose to work with email interviews for two reasons. First, I found and contacted my informants via a Facebook group for former *Evoke* players. My initial contact with them took place on 'chats' enabled by Facebook. These former players were accustomed to communicating in writing when they played *Urgent Evoke* (on the message board and in blog posts). So it seemed natural to continue in writing. Second, the nature of the e-mail interviews offered me an opportunity to work at a different pace – an e-mail interview is slower compared to a face-to-face interview. Answers and questions are not always given or asked the same day. In a face-to-face interview, the response time for both interviewer and interviewee is short. Longer pauses can feel awkward and break the cultural conventions of the rhythm of a conversation. The e-mail interview also allows a very different reaction time, which made it possible for both me and my interviewees to take some time to consider the Qs and As of the interview. As a participant in another research project remarked after being silent during an email communication for some time:

> *I didn't email you straight back, because I was thinking about my answer. So my responses were more carefully thought through and probably longer than if I'd tackled the whole thing in a face-to-face interview ... again other ideas would probably not have come out because of the time pressure. This is what's good about the email process because ... it allows time to consider the questions and frame an appropriate response.* (James 2007: 970)

As a researcher trying to orient myself in a new field and in a complex case, having the time to read the answers of my informants several times and think about them before asking new questions was valuable.

Communicating in writing also enabled me to follow several threads in the interview. When one asks a question in a face-to-face interview, the answer often generates several new questions, but you can only ask one of them. A difficult sorting process thus takes place during the entire interview. By contrast, in an

e-mail interview I had the opportunity to ask several new questions for every answer I received. Of course, I also had to sort out my questions, but the process of doing so was less hurried and difficult than in a face-to-face interview. The method also opened up the enrichment of the written words with links, screenshots and other types of text. One of my informants in particular used this opportunity in order to show me things that she thought would enhance my understanding of what she was trying to tell me.

Email interviews also allowed me to conduct several interviews at the same time. I began every interview with the same three questions and used the compilation of answers to generate new questions. This meant that a sort of cross-pollination between the interviews was taking place. Issues about or judgments of the game brought up by one player could be checked and discussed with other players.

But even though the e-mail interview offered me great opportunities to explore, I soon learned that the pace, the potential to ask many questions, to explore the references provided by the informants and to cross-pollinate the interviews created very dense empirical material. In fact, the amount of material was almost overwhelming. The challenge of working with this method was to find a balance between elaboration and focus.

Face-to-face interview, on- and off-line: The one off-line face-to-face interview was conducted in spring, 2012 with Robert Hawkins, at the World Bank headquarters in Washington, D. C. The 12 on-line interviews made via Skype were all conducted with winners of *Urgent Evoke* from my workstation at home.

Compared with most of my e-mail interviews, these interviews were less explorative. My aim was no longer to open up a larger field and broaden my perspective, but to dig deeper into and examine the nuances and the complexity of a smaller section of the field. This made it relevant to replace the slow, open and expansive mode of the e-mail interview with the more expeditious, tight and focused mode of the face-to-face interview.

Furthermore, I felt a need to look my respondents in the eyes. I wanted to meet Robert Hawkins personally at the World Bank because I hoped a face-to-face meeting would help me get further access to data and background information about the game. I also wanted to visit the World Bank office building in order to get an impression of the organisation and its culture. And I wanted to see the winners who had become the focus of my research in order to get a 'thicker' impression of who they were than words in an e-mail could provide.

I have long felt that adding a physical dimension to the interview, i.e., hearing someone's voice and seeing their posture, mimic and gestures, is one of the great strengths of a face-to-face interview. Even though the off-line version enhances the tacit, sensory dimension, the online meeting made possible by Skype's videoconference tool offers a good second-best. During my Skype interviews, I had the feeling that I had met my respondents because I was invited via the web camera into their offices, living rooms and kitchens and they into my study. This modest look into their lives provided me with some sensory data that I did not try

to transcribe, but which played a role in my contact and communication with the players. It helped build a more confidential and open interview situation faster, and gave me a more multifaceted picture of the people I was talking to.

I used Brenda Derwin's SMM as an inspiration in the construction of my interview guide. The structure of the SMM interview guide creates a constant dialectical movement between the subject, the gaps that she faces and the 'helpers' she has used in her bridge-building process. This movement is fundamental to the understanding of human learning and activity found in Activity Theory.
The structure of an SMM interview enabled me to construct empirical material focused on the dialectical interplay between technology and subject – game and player – and the influence of this interplay on the outcome, the subject's newly built cognitive bridge.

At the same time, Derwin's interview technique connects with Bakardjieva's 'method of openings' in the sense that it allows the researcher to focus on what helped or could have helped in the sense-making process. This focus opens up the possibility for a phronetic as well technical knowledge production that leads to a discussion of how the game was expected to help, could have helped and did help the sense-maker/player in her development process towards becoming a post-game social innovator.

Derwin uses seven steps in the interview guide: to tap situations, gaps, bridges, outcomes sought and/or obtained, and to dig deeper into gaps and struggles, what led to an evaluation and how different factors helped. Every step in the guide is accompanied by a couple of exemplary questions. For example, the questions suggested in step one ('to tap the situation'): 'What happened', 'What stood in the way' and 'How did that connect with past events' (Derwin 2008). Derwin is very consistent in her use of 'what' and 'how' questions. Asking questions beginning with 'what' and 'how' are very open questions that invite the interviewee to tell her story. The seven steps in the guide construct a timeline in the interview where we follow the interviewee on a movement through time and space. In other words, the interviewee moves from an initial situation where the sense-maker faces the gap for the first time into to the construction of the bridge leading to the outcomes. As the sense-maker's movement though time and space is established, the researcher tries to construct a deeper understanding of the gaps, bridges and 'helpers' that are presented in the account by asking further questions on these subjects. I did not used all Derwin's questions, but tried to build my interview in a way that would allow for a movement through time and space with the interviewee, beginning with 'What made you play Urgent Evoke'?

Social Network Analysis
The network that I studied is the network of the players of *Urgent Evoke,* defined as the people who registered in the game. A total of 19,386 people registered to play *Urgent Evoke* (Gaible and Dabla 2010). Of those, 17,574 are included in the dataset used for the Social Network Analysis. Isolates, which are players without any ties, were not included in the dataset because they do not have any ties with other players and therefore do not contribute to any analytical insights about the social interaction between the players.

The data used was retrieved from *Urgent Evoke* site using a web crawler designed for the purpose; it is a software application designed to collect information from the Internet. The web crawler used in this thesis would copy the friends' lists from *UE* and place the data in an Excel spreadsheet.

The information about who is connected to whom and how many ties an individual node has (degree) was used to create different calculations on and visualisations of the *UE* network in the programme called NodeXL Pro released in 2015. The basic version of NodeXL is free, online software that functions as an add-on to Microsoft's Excel. NodeXL allowed me to import the data placed in the Excel spreadsheet and analyse and visualise the data in different ways.

I used NodeXL to conduct different kinds of analysis of the data. First of all, I asked the software to identify any groups/clusters/sub-networks among the *Urgent Evoke* players: 'In the language of network analysis, clusters are pockets of densely connected vertices [nodes] that are only sparsely connected to other pockets' (Hansen, Shneiderman and Smith 2011: 93). By identifying the cluster, I was able to discuss the structure of the overall network on a more informed basis because the visualisation of the clusters enabled me to see networks within the network that are not visible when the data is in a more raw form. Furthermore, identifying and visualising the clusters enabled me to analyse and discuss the position of the winners in relation to the overall network and then make a more focused analysis of the cluster that the winners are embedded in. My analysis of the sub-network was once again focused on the structure of the network as well as the winners' positions within the network, and the same kind of analysis was conducted on the winners' ego-network.

In other words, I conducted analyses of the network on a macro-, meso- and micro-level. I also asked NodeXL to calculate the Degree centrality, the Betweeness centrality and Eigenvector centrality on the macro- and meso- levels, and created a top one hundred list of the players for each type of centrality measure. I did this to enable an analysis of the winners' representation among the players that were seen as well-positioned players according to the different measurements of centrality. These different analyses on the different levels were all made in order to determine how the network structure and the winners' positions within it supported the empowerment process.

When I began my social network analysis, I soon became aware that the data I could produce was only telling me part of story about the network because I could only see that a contact had been made between players. I could not see who had initiated the contact, what had been exchanged and at what rate, or what the contact meant to the nodes involved. I then decided to present the winners I interviewed with a list of their in-game contacts and I asked them to tell me which of these contacts had been important to them, how intense the contact had been and if the contact had continued after the game. This was not a very successful method, as most of the players had difficulty remembering most of the names included in their in-game network. It seemed as though pointing out certain people in their network worked against their perception of what the player community was.

Working with a dataset encompassing the connections of 17, 574 people gives a good indication of what it means to work with big data. While I had been trained in conducting interviews, observations and other forms of qualitative methods, working with the *UE* network data handed me a totally different form of material. First, it was out of the question that I would be able to read anything from the raw data, where as a qualitative interview already begins to mean something when you conduct it. Second, conducting SNA on a large data set makes the researcher dependent on software like NodeXL and algorithms that are difficult or even impossible to comprehend. Third, small mistakes in the data are difficult to detect, which can lead to large analytical mistakes.

For example, a magical structure appeared in my first visualisation of the overall network. The visualisation showed two distinct sub-networks connected by one node. It was quite fascinating, and I was wondering which this one node was that was acting as a very important bridge in the game. Could it be one of the winners? It turned out to be a mysterious person, who named herself '-'. When I discussed this interesting finding with several people, someone suggested that it was a bug created by the crawler, which noted a '-' every time it met a closed player profile in the database. The mysterious '-' was thus a representation of a collection of closed profiles that in the visualisation looked like a very important, well-connected and well-positioned node. This finding led to a clean-up of my data, which resulted in a totally different image of the overall network structure, and greater uncertainty and anxiety on my part about finding or creating more 'bugs' in the dataset.

SNA contributed to my research by allowing me to look at my research object in a different form, just as one can look at water as a liquid, gas or solid. It enabled me to see the pattern of the social network that the players wove with their communication and to discuss the impact of the structure on the outcome of the game. If I conduct research on more G4C games in the future, I would like to apply SNA again, but preferably in cooperation with the game designers. Such a collaboration would allow the method to becme part of the game design, which would then enable an analysis of how the network grew over time, who initiated the contact and how strong the contact was.

Conclusion

As stated in the reader's guide in the beginning of the thesis, the aim of Chapters 3 and 4 is to answer this question: *How does the cobbling of Activity Theory and Social Network Analysis anchored by Brenda Derwin's 'Sense-Making Methodology' and Maria Barkadjieva's 'Methods of openings' contribute to our understanding of how a game design can generate openings for the empowerment of the players?*

Using AT allows me to think of the players' development – hereunder empowerment – as a result of a dialectical relationship between the game design as a technology and the players, who are seen as both individual learning subjects and as important members of a larger community. Development in AT is not just seen as an intra-personal process, but also as a process that includes the development of new technologies and new activities. In this way, AT provides a theoretical understanding of how the dialectical relationship between humans and technology

can lead to human development as well as technological innovation and social change.

AT is a generous framework that supported my goal to create a multifaceted, complex understanding of the interaction between the player and the game design both before, during and after the game is played. Since the openness and the systemic approach of AT can be overwhelming, combining it with SNA, Brenda Derwin's 'Sense-Making Methodology' and Maria Barkadjieva's 'Methods of openings' have allowed me to tame the complexity of AT without undercutting the theory.

By mixing AT with SNA, I am able to enhance the focus on the meaning of the social network in the game play formed by the communication between the players. This strengthens an element already present in AT, and also plays an important role in the game design, thereby anchoring AT.

Derwin's 'Sense-Making Methodology' also anchored the complexity of AT by creating a focus on the players' sense-making of the game design and game play. Derwin's method – just as AT - operates with a systemic and procedural understanding of human development, but her methodology also establishes a focus on the individual player's sense-making of the game. By drawing in Maria Barkadjieva's 'Methods of openings', I created another focus that could help me anchor AT by looking at what is possible to achieve with a game like *UE* in relation to citizen-driven social innovation.

In other words, mixing AT, SNA, the Sense-Making Methodology and Methods of openings creates a theoretical and methodological framework that allowed me to look at the interaction between *UE* players and the game design as a complex and dialectical process that create openings for the players to bridge some gaps and thereby become empowered post-game social innovators – a process seen as both a intra-personal development process and as a process of technological and social development.

Chapter 5

ANALYSIS

In this chapter, I unfold an activity theoretical analysis of *Urgent Evoke*, and look for the openings for empowerment of the players created by the game design. As noted above, my focus is on the winners of the game, and their interaction with and sense-making of the game. The analysis is based on interviews with players (winners and non-winners), document analysis and social network analysis. Occasionally, I mix with data on players other than the winners.

The analysis consists of three sections. The division of the analysis into these three sections is intended to emphasise the process that the players go through from being ordinary citizens to becoming players of *Urgent Evoke* who become post-game social innovators. I have split this process analytically into pre-game, in-game and post-game phases. An additional factor affecting the analysis is the theoretical complexity of AT, where the relationship between and among all parts of the activity system is seen as equally important. Since this complexity is very difficult to sustain analytically, I have chosen to create a certain focus in each section of the analysis.

In the first section of the analysis, the focus is on the players' motivations for playing. This focus is important because the subject's motivation in AT is seen as the instigator of all activities. I see the players' motivations for and decision to play as a first step in the process towards becoming post-game social innovators. The sub-research question that this section of the analysis answers is: *How did the interplay between the players' motivations and the game design generate openings for the winners' interest in playing the game?*

In the second section of the analysis, the analytical focus is on the community and the division of labour and how the game's social interaction influenced the winners' decisions to go all the way and turn in an Evokation. I see this decision as a sign of the players' seeing themselves as possible post-game social innovators. The sub-research question that this second section of the analysis answers is: *How did the division of labour in Urgent Evoke create openings for the winners to go all the way and produce an Evokation?*

The focus in the third section is on the winners' attempts to implement their Evokations, which I see as the final step in their process towards becoming post-game social innovators. This third section of the analysis answers the sub-research question: *How did playing Urgent Evoke create openings for the winners' implementation of their Evokations post-game?*

Before the analysis begins, let me provide an overview of who these winners are – their geographical location, sex and what they were rewarded by the World Bank. I have been able to identify 31 out of 36 winners. Of the 31 winners, there were 7 women and 24 men. A total of 10 of the winners were from North America, 7 from Africa, 6 from Asia, 4 from South America and 4 from Europe. A total of 22 of the winners were awarded a mentor, 10 received seed funding, 28 participated in the

Global Giving Contest and 13 were invited to Washington, D. C. for the *Evoke* Summit at the World Bank. I interviewed 18 of the 31 people via e-mail, Facebook and Skype. In the analysis, the players interviewed have been given pseudonyms. This is done for ethical reasons and to emphasise that the analysis does not necessarily reflect the informants' understanding of the game, but should be seen as my interpretation of the data.

The maps below locate the players' geographical locations. Not every player is individually identified on the map because some of them are located so close to each other that their markers fall on top of each other.

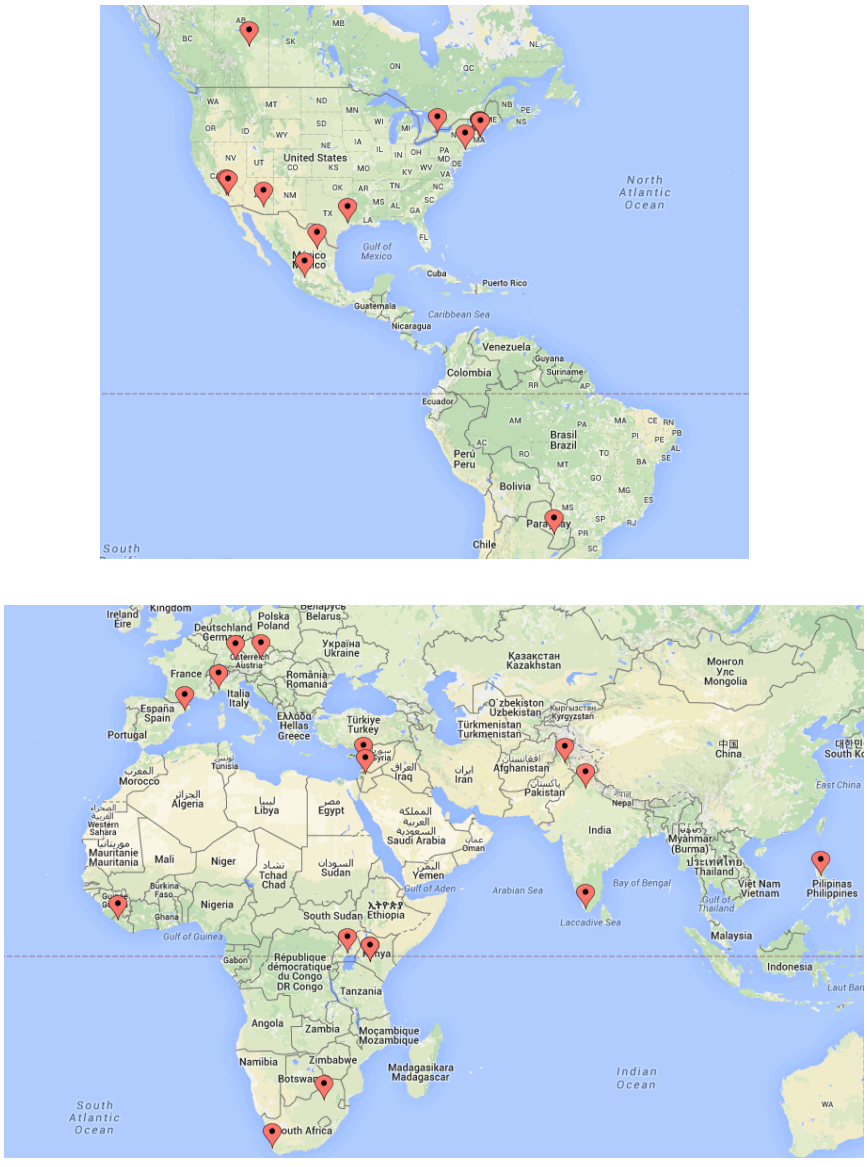


Figure 14: Map of the geographical locations of UE players, created in Google Maps.

Analysis: Section One

Designing for multiple motivations

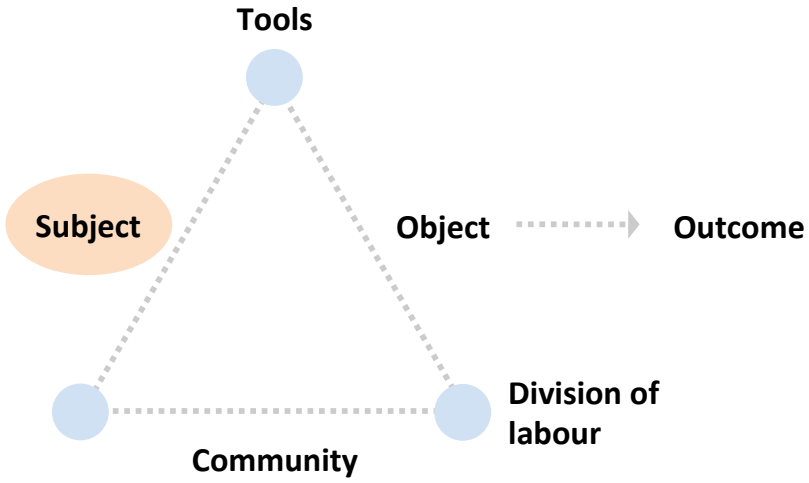


Figure 15: Reproduction of model of second GAT from Engeström 1987: 78. Highlight of subject added by author.

The starting point in Activity Theory is the subject's motivation for participating in an activity in order to reach an object. This motivation along with the game design's role in maintaining it is the subject of this first section of the analysis.

The winners' motivation for playing the game is the first step in a longer process of becoming post-game social innovators. By choosing to play a game like *Urgent Evoke,* participants display an openness to the idea of citizen-driven social innovation, even though they are themselves unsure about how far they are willing, interested in or capable of going in the game. Without this openness, there will be no empowered post-game social innovators.

I examine the players' different motivations in this analysis. I then discuss how these motivations compare with those gathered from previous literature on online games, and I discuss how the relationship between the players' motivations and the game's design generated openings for the empowerment of the players as post-game social innovators. I chose to divide the presentation of the players' motivations into seven paragraphs - *players with an interest in developing issues*, *players with pre-existing social innovative ideas, players interested in the resources of the game, players motivated by the use of the technology, players motivated by the opportunity to express themselves, players doing others a favour and other players.* The last category is an umbrella category for non-winning players. The paragraphs are based on my initial analysis of the players' descriptions of what motivated them to enter the game. I chose this structure – where motivations are bundled – in order to accentuate similarities between the motivations at play while at the same time allowing the differences and nuances to shine through. But as the analysis demonstrates, most of the players had a mix of motivations; there is therefore an overlap of motivations outside the analytical categories created.

Players with an interest in developing issues

All communication in and around *Urgent Evoke* is very much concerned with social

innovation and developing issues. It is safe to say that most *UE* players probably had some level of pre-game interest in this type of issue, but for some of the players this interest was the primary motivation for starting to play.

Allan entered the game because he was interested in the overall subject matter. He lives in Urbana, Illinois in the United States, he was 31 years old at the time of the game, has a bachelor's degree in Animal Science and works at the help desk at the University of Illinois offering IT assistance to teachers. He had been interested for some time in personal development and had been looking for ways to become more socio-politically involved. *Urgent Evoke* seemed to be good way to explore these interests further:

> […] *I entered the game just as a chance to explore social issues and I kind of already had some of the same interests in the past and this kind of allowed me – you know – you get the chance to focus in on certain issues and to develop […] before you may have, you may cared about certain things, this is a chance to dive in* […]. (Allan)

At this stage of the game, *Allan* had not bought completely into the goal of the game and was not interested in winning. He wanted to explore, learn and develop, and he saw the game as a chance to do just so.

At the time of the game, *Gabriel* was studying international commerce at a college in Saltillo, Coahuila in Mexico. He was working on a project about social innovation when a friend showed him a video of Jane McGonigal talking about *Urgent Evoke*. This led him to UE, and as he put it:

> *I decided to apply to see what happened and that is the way it started and I kept going and going to the end.* (Gabriel)

Gabriel did not express any other motivation for playing other than his doing a project for school that was also concerned with social innovation. But as the game developed, he became caught up in it, and his motivation changed from the game's being school-related to developing a genuine personal interest in what the game had to offer him.

Like *Gabriel*, *Laura* was a student in 2010. She was working on her master's degree in architecture in Barcelona, Spain, when she stumbled upon *Urgent Evoke* while searching the Internet for information on sustainable emergency architecture. The game was in its second week when *Laura* started playing, and once she started, she could not stop:

> *I couldn't stop playing instead of continuing my research and writing […] what triggered me mainly was its direct relevance to all what I believe in in terms of finding interesting and innovative means to heal our world. (*Laura*)*

Also like *Gabriel, Laura's* interest in *UE* was related to her study: the game aligned with her ideas about how we need to find new ways to solve some of the wicked

problems the world faces. Also like *Gabriel, Laura* was sucked into the game and forgot about working on her dissertation for awhile.

Jasper had always been interested in politics. For him, *UE* was a chance to think about political issues:

> *I have always been politically interested and I have always been thinking about how to improve things and here was an avenue where I could try to do that*. (Jasper)

Jasper, who lives in Canada, was 15-years old at the time of the game and attending grade nine at junior high school. Besides seeing the game as an avenue for thinking more about socio-political issues, he did not think very much about why he wanted to play,

> *To be honest I didn't know what to expect. I just signed up for it on a whim and went on from there* […] *I guess it kind of had to do with just the way it was set up. The first couple of challenges they took some time and like I was slow in completing them and after them I kind of thought I have already completed three why can't I just do the following 27 of the [?]. I was kind of sucked into it I guess*. (Jasper)

Jasper described himself as a competitive person: when he sees a clear goal, he will try to achieve it. *Urgent Evoke* provided him with such a goal and '[…] *so I did whatever I could to achieve that goal'.* (Jasper)

Tom, like *Jasper*, was a very young player. At the time of the game he was still attending High School. He has an interest in engineering and he wants to:

> […] *do something applying engineering to actually help people and make a difference. (Tom)*

Tom found that *UE* allowed him to not only think, but also to take action, which fit very well with what he wants to learn and do.

The five players presented here were all occupied with social and political issues in different ways previous to the game; it is this initial interest that motivated them to sign-up as players. The game was an opportunity for all of them to dive into and immerse themselves in socio-political issues in an active way. For *Gabriel, Laura* and *Tom,* the motivation was connected to their educations and some level of professional development. For *Allan* and *Jasper,* the motivation seemed to be more personal. But where *Allan* saw the activity of the game as a chance to *develop* himself, *Jasper* saw it as an opportunity to *think about* how to improve things. The two of them saw different opportunities in the technology and used it in different ways. For *Jasper,* it was a competition. But for *Allan,* it was initially a chance to explore. Only later, when he decided to turn in an Evokation, did it become a competition for him as well.

What the stories tell us is that motivations change. Only *Jasper* was focused on winning from the beginning of his involvement. The others had different initial goals, but they all ended up sending in an Evokation and reaching the goal of the game as defined by the World Bank. These changes in motivation during the game was a recurring element in the interviews with the winners, as the continuing analysis demonstrates below.

Players with pre-existing social innovative ideas
Around the time that *Urgent Evoke* was launched, *Michael* was about to finish his Master's Degree in architecture at the University of Houston, Texas USA.
His girlfriend was also enrolled at university and was going to Paris to study that spring. *Michael* was going with her, but because he was busy with his master's project and graduation details, he forgot to arrange for a working permit and suddenly found himself in Paris with a lot of time on his hands. He decided to continue working on his thesis, which is concerned with how to build a library structure in India. One day while surfing the Internet, he stumbled upon a TEDtalk by Jane McGonigal that led him to *Urgent Evoke*. The game was in its second week when he decided to participate. He saw the game as a framework that could help him develop the ideas in his master's project further and was in no doubt that he would also try to win the game:

> […] *when I got into it I guess that one of my goals was definitely to win the Evokation.* (Michael)

As with *Michael*, several other players entered the game with a pre-existing social innovative idea, but very few expressed any initial interest in the idea of winning the game. Instead, they signed up for the game because it offered them a platform where they could discuss and develop their ideas in an environment concerned with socio-political issues.

One of these players was *Susanna*. *Susanna* is originally from Belgium but at the time of game she was about to move to Tanzania after having lived in the Philippines for six years with her family and teaching English Literature at the international school in Manila. *Susanna* says:

> *Evoke was for me a – it just turned into a fortuitous and really perfect platform for recording and framing work that I was doing anyway* […] *so it just helped me pushing those things forward.* (Susanna)

Like *Allan* and *Jasper*, both *Michael* and *Susanna* had a previous interest in developing issues and social innovation: they are both working on issues relevant to the game before starting to play. But like *Allan, Susanna* expressed no interest in winning, she did not even seem particularly interested in *playing* the game.
When she talked about *Urgent Evoke,* she called it a 'platform for recording and framing work', thereby creating her own definition of the central activity in *Urgent Evoke,* which may have caused her to distance herself from the activity of playing. But even though *Susanna* did not have winning as her object, she entered the game because she - like *Michael* – saw it as a relevant technology that would help her push forward the development of a social innovative idea. So even though there

was an initial gap between *Susanna's* motivation and the goal of the game, both her and *Michael's* way of using the game is very much in line with what the World Bank hoped to achieve. And just as in the example of *Allan, Susanna's* motivation changed during the game: she ended up sending in an Evokation and attempted to win the game.

Players interested in the resources of the game
Axel is a programmer from Zimbabwe, but he was living in South Africa while playing *UE.* Like *Allan* and *Jasper*, he was interested in the overall subject of the game and has been wanting to work with social innovation for a while:

> *Social innovation was something that I wanted to do anyway, living in Africa surrounded by poverty, and then I just stumbled across it so it was a match of what I wanted to do any way.* (Axel)

Axel entered the game in week four, so he had to work very hard to catch up. He was motivated by the chance to receive the certificate that the World Bank provided to all players who completed the game, and by becoming part of a network of like-minded people and experienced social innovators:

> *Now I think that initially the World Bank certificate would be useful for setting up and be introduced with change makers in the southern continent, and it did, to be fair. And I think networking was the other main thing that I wanted to achieve. Network with other people with similar interests and people that have done things before, try to find a mentor through the program*. (Axel)

Axel was not focused initially on the resources that became available to the winners of the game (e.g., seed money, participation in the *Evoke* Summit or in the Global Giving crowdsourcing contest). He was more interested in the resources that the game offered to all players who completed the game – whether they turned in an Evokation or not. He was very conscious about how just playing the game could empower him to do the social innovation work he had always dreamt of doing; it was not until later in the game that he saw that he had the chance to win.

Another player focused on the resources available in the game was *Anni*, an American woman living in Somerville, Massachusetts USA at the time of the game. She described how she was looking for a community:

> *I was always looking for a community to be a part of: one, which focused on globally, inspired activism in a positive way. It's hard to find on the Internet. Certainly you can find other activists, but they generally aren't in a community working together and sharing goals, and it's even rarer to find a place that's encouraging learning and exploring while also focusing on doing practical things.* (Anni)

Like *Michael, Anni* found *Urgent Evoke* because she happened to see Jane McGonigal's TED Talk. The game was in its second week when she decided to join. She saw a special online community in *UE,* and it was the game's combination of

providing a common goal, focusing on positive activism and offering opportunities for exploring and learning as well as practical actions that drew her to it in the first place.

Anni described in the interview how she had been working for some time on an idea for an online site to collect ideas that can 'help humans be mentally healthy and heal from major mental illness'. (Anni). *UE* provided her not only with the social network that she needed in order to develop her idea, but also with other resources such as energy, encouragement and hope:

> [the game] *helped me in actually getting some material things accomplished (a website, some classes, postcards to promote the organization and its ideas, and some references for applying for grants for more workshops). And, of course, the trip to DC! You ask where the energy came from to play the game, but it was the game itself that gave me energy. It gave me hope, encouragement, and in the end, real material support.* (Anni)

When one hears *Anni's* story, it is easy to define her motivation as an escape from her life in the physical world. In the interview, she talked about a life in poverty, a cheating husband who left her to live a life she does not approve of and about being homeless. At the time of the game, *Anni* was living with a family who provided her with housing in exchange for her taking care of their 5-year old twins. This arrangement meant that her life was stable for the time being, and that she had reliable access to the Internet in order to play *UE*. However, despite the challenges she was confronted with in her off-line life, it would be unfair to say that *Anni* was trying to escape. Instead, I read her story as an expression of a will to belong, to explore social issues, to learn and have a positive impact on the physical world, and to find the resources she needed to do that.

David is from Pakistan. He has been working for the World Bank since 2008 directly and indirectly as a technical advisor. Over the years, he had been taken several online courses developed by the bank, and in early 2010, he was looking for a new online course that could help him in his professional development. When he found *Urgent Evoke,* he was very happy to learn that everyone can play. For *David*, *Urgent Evoke* provided access to learning and gaining new knowledge:

> […] *I was so excited, I was logging in – I think every day – to see other responses, because the interesting thing about the game was not how you were contributing, the interesting thing was to see others, and learn from their approaches and then challenge them, and you know, give them feedback.* (David)

David's motivation for playing resides in the social part of the game: in sharing, collaborating and learning with others.

Players motivated by the use of the technology
Peter was like *Michael* and *Susanna*: he entered the game with a pre-existing social innovative idea. *Peter* lives in Buffalo, New York USA. He has a master's degree in multidisciplinary studies and a bachelor's degree in religious studies. The idea that

he brought with him into the game was how to make a website where the people of Buffalo could collaborate to solve some of the challenges the city is dealing with. But *Peter* was not focused on this idea at the beginning of the game. Instead, he was motivated by the novel way of using games to deal with socio-political issues. He says:

> […] *it was something that I had never thought about before, you know, that people can actually use games to actually bring people together and try to solve problems, you know real problems. So it was an exciting thing, it felt like I was part of something very new and innovating.* (Peter)

Peter was not alone in being motivated by the political use of the technology; other players express the same initial curiosity. *Oscar* and *Jonas* are two other such players. *Oscar* says,

> […] *so I was more keen on trying to understand how a game can change the world. That was the first request on my mind.* (Oscar)

Oscar was enrolled at a university in Alice Town, South Africa, when *Urgent Evoke* was played. He was studying economics and learned about the game from a poster hanging on a university bulletin board.

Jonas lives in Mexico. He had previously read about '*World without Oil*', an earlier game that Jane McGonigal, the game developer of Urgent Evoke, was involved in. To his great regret, he missed that game and when he found out about *Urgent Evoke*, he saw it as a great opportunity to finally experience how games can work as a tool for social change. He says:

> *I just loved the idea of this game that tried to solve real life issues – world issues – and again had all these characteristics: that it was cooperative, that it was all around the world and that is was this alternative reality game where – I think it allows – this form allows a lot of freedom and exploring and self-expression and meeting a lot of interesting people.* (Jonas)

The idea that games can be used for socio-political purposes was not new to *Jonas*. He was intrigued about the game's connection to the physical world, the global scope of the game, the freedom to explore and express and the opportunity to work together with other people that the game provided. *Jonas's* motivation for playing was the chance to *experience* how such a game works.

Another player interested in the technology is *Diana*, who is a teacher living in Liberia, Africa, where she works as a volunteer. The the issues of *Urgent Evoke* are very real to *Diana*, but she started playing for several other reasons:

> *I'm a gamer and have been since the first time I used a computer, so the idea of a game appealed to me. I was a teacher trainer in Liberia, South Africa, at the time and was involved in new cultural situations and challenges. At first, I thought the game would be a good diversion but as I played, I found it was very useful in helping me to look at my efforts, goals and surroundings in new*

> *and more productive ways. I like to use games when I teach and this was a game that taught so, of course I was intrigued.* (Diana)

Diana was the only player who defined herself as a gamer and said that she was interested in *Urgent Evoke* as a *game*. As we have seen before, motivations change during the game and this was also the case with *Diana*. As she started playing, her motivation for playing was extended: she began to see the game as a personal development tool and as a source of inspiration for her work as a teacher. As we know, she ended up sending in an Evokation.

That the novelty of technology can motivate players to enter the game is interesting, but not at all in line with the goal of the World Bank. It is possible to imagine that a large number of the people who chose to visit *Urgent Evoke* without ever playing (I will return to this group, their numbers and their behaviour later) shared *Peter's*, *Oscar's* and *Diana's* technological interest in the game. Many of these visitors probably left the game when their curiosity had been satisfied. This gap between being motivated by the novelty of the technology and the World Bank's goal of empowering a new population of social innovators represents a challenge for the World Bank, of course. But it also represents an opening, because some of these techno-curious people changed their motivations when they entered the game. Thus did *Peter, Oscar* and *Diana*, who ended up completing and winning the game. The novelty of the game could therefore be seen as an opening for drawing in potential social innovators, an opening that will of course shirink over time as more games with a socio-political goal similar to *Urgent Evoke's* see the light of day.

Players motivated by the opportunity to express themselves

> […] *at the time I was new to blogging and writing and at the time I was really about writing from time to time, so it looked like a challenge for me to write and also in a way contribute to some kind of community development […] but also the network because I thought there would be many people joining with different kinds of expertise, so actually I hoped to learn from them […] but most important for me was to write and share and express myself on the platform*' (William).

For *William*, *UE* was a platform for self-expression. He was not interested in winning, but recognised the opportunity to learn from others. The fact that the game was structured around the players' writing and posting about the wicked problems motivated him. Again, we see how motivations change and how *William* also ended up sending in an Evokation.

Players doing others a favour

Alice lives a busy life in Amman, Jordan, working as CEO for a global NGO. One day, she was contacted by an American friend who was a consultant, who asked her to give him her opinion about *Urgent Evoke*. She recounts:

> *I had zero time for games, in fact I hadn't played an online game since* Kings Quest *back at the beginning of games…so I simply replied, 'I'll ask my 12-year old to test it and revert'. He answered, 'you're 10 out of 12 or so who answered*

> *in this exact way'. I felt bad, and I felt that I should respond properly to his email by checking the game out and giving him my opinion...and that was it, I was hooked on the spot* [….] (Alice)

Alice was not interested in wining; in fact she was not interested initially in playing at all. Her motivation for entering the game was to do a friend a favour. She later told how the game connected with her work, how the system of completing missions and quests and receiving tokens pulled her in and how she slowly started to see '*the wonders of this game*'. (Alice)

At this point in the analysis, the 17 of the 18 winners interviewed have been introduced. *Eric* is still missing because he never answered the question of what motivated him to play; I introduce him later in the chapter.

Before moving on to the discussion, I would like to discuss briefly some of the motivations of the many players who participated in the game but did not win.

Other players
Even though the winners of the game played a prominent role in my data, other types of players are also represented directly (I have interviewed them) or in-directly (they are mentioned by the winners or are part of the evaluation of *Urgent Evoke* performed by the Natoma Group). In the data on these players, I see some of the same motivations as mentioned above, and I do not spend time repeating them. But the data also indicates other forms of motivations than those expressed by the winners; it is those that I address here.

First, *Urgent Evoke* had 171,958 individual visitors. Only 19,386 of these visitors registered as players. That means that 152,572 people only came to look at the game, but never intended to play. But 80,000 of these 152,572 'visitors-only' paid more than *one* visit to the game during the ten-week game period (Gaible and Dabla 2010). This tells us that even though these visitors were not motivated to play, they were interested enough in the game to spend time visiting the *Urgent Eovke* site more than once, even several times.

Another group of people who are connected to the game are the 19,386 people who registered as players. Of this group only 6,618 people eventually completed at least one mission or quest in the game. This means that 12,786 people registered but never took any other action that aligned with the goal formulated by the World Bank.

It would be easy to argue that these players were probably not motivated enough to engage in the game, but the evaluation of the game made by the Natoma Group shows that about 85 of the 518 surveys distributed on the *Evoke* site during the last week of the game were answered by players who had not completed one single mission or quest. This indicates that among these registered but largely passive players there was a feeling of engagement in the game that was strong enough to make them want to spend time answering a survey. I find it important to mention this, even though I do not know what motivated these registered, passive players to participate in this silent way. At the least, this largely silent group underscores

what we have seen among the winners – that there were many different motivations for entering the site of *Urgent Evoke* other than winning the game. Among the participants who registered in the game but did not complete all missions and quest, we find *the librarian* from Canada. He had no intention to try to win the game, but was willing to spend time helping other players with their missions and quests. *The librarian* created a post on the *Evoke* site urging players to contact him if they need help with researching a subject in the game.

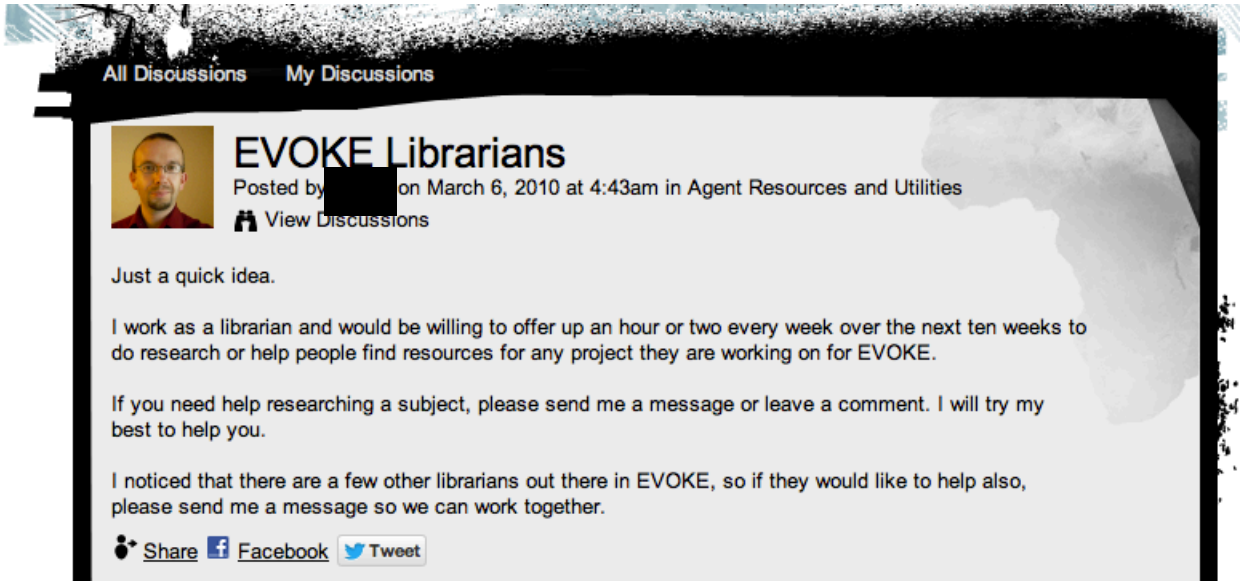


Figure 16: Screendump made 16 July 2016, www.urgentevoke.com/profiles/profile/show?id=XX

The librarian's offer indicated that he was not motivated by the chance of winning the game, but was certainly willing to use his professional skills as a librarian to support the players of the game in their aim to research the missions and quests.

What the data on visitors-only and the registered-passive-players and the example of *the librarian* show is that even though these individuals did not participate in the game in the way intended by the World Bank, the structure of the game (e.g. that it does not have levels that a player must complete to access to the next level) allowed for different forms of motivation and participation. As noted above, my data do not tell what motivates this way of participating, but I return to impact of these passive players on the game and the winners later when discussing the division of labour.

Partial conclusion

The aim of section one of the analyses is to answer this question: *How did the interplay between the players' motivation and the game design generate openings for the winners' interest in playing the game?*

The above introduction to the players and their motivations to play demonstrates that there are many different motivations – or, as Derwin would phrase it, starting to play makes sense to the players for many different reasons. For some, players the game is a chance to dive into and investigate socio-political issues or develop

socio-political projects they are already thinking about/working on. Others are interested in how a game can generate social change, or they see the game as a platform for self-development and self-expression. They also may have entered the game just because they want to help a friend. Only three of the players interviewed entered with the intention of winning the game. But because the players interviewed are all winners of the game, we know that their motivations changed over time, and that their objectives became much more aligned with the goal formulated by the World Bank. So something happened during the game, which is the subject of the following section of the analysis.

While the finding that players had different motivations for playing is not a revelation, but the data might challenge and add to the current literature on the subject. Richard Bartle (1996) and Nick Yee (2006) are known in the literature on games for their descriptions and tables of motivations for playing online multiplayer games. Bartle's initial table describes four different types of players: achievers, explorers, socialisers, and killers (Bartle 1996). Yee expands on Bartle's findings. In Yee's table (see below), these four player types are turned into three overall motivations: achievement, social and immersion. These three motivations all contain three to four sub-motivations that finally provide us with ten possible motivations for playing games. See the following Table 2:

Achievement	***Social***	***Immersion***
Advancement Progress, Power Accumulation, Status	**Socializing** Casual Chat, Helping Others, Making Friends	**Discovery** Exploration, Lore, Finding Hidden Things
Mechanics Numbers, Optimization, Templating, Analysis	**Relationship** Personal, Self-Disclosure, Find and Give Support	**Role-Playing** Story Line, Character History, Roles, Fantasy
Competition Challenging Others, Provocation, Domination	**Teamwork** Collaboration, Groups, Group Achievements	**Customization** Appearances, Accessories, Style, Color Schemes
		Escapism Relax, Escape from Real Life, Avoid Real-Life Problems

Table 2: Reproduction of Yee's model of motivation subcomponents presented in 'Motivation for Play in Online Games' *by Nick Yee (2006).*

Many of the motivations described by Yee can also be found among the players of *Urgent Evoke*. In the descriptions of the players' motivations, I recognise all the *Social* elements described in Yee's Table – *socialising*, *relationship* and *teamwork.* Players like *David*, *Jonas, Axel* and *Alice* were interested in meeting like-minded people, they wished to chat, help and support their game colleagues and to discuss and collaborate on developing issues. The same goes for Table 1's sub-motivations of Achievement (*advancement, mechanics and competition*). *Alice* mentioned how the advancement structures (e.g., collecting badges and gaining feedback points) motivated her game play, and *Michael*, *Jasper* and *Jonas* told us how they were interested from the beginning of the game in competing for the winner position. And as we have seen, a number of players, including *Peter* and *Oscar*, joined the

game because they were interested in understanding how a game could generate positive social change work.

But the Immersion motivation section in the Table (and its discovery, role-playing, customization and escapism sub-motivations) are more challenged by the data from Urgent Evoke. Even though UE said that all players were members of a secret international network of people with social innovation superpowers, this role-playing element was more a part of the story framing the game than it was an integrated part of the game play. Instead, players were encouraged to 'play' themselves. Furthermore, the players' customisation possibilities in UE were limited to the photos they placed on their profile page. But the one incongruity between the findings of my analysis and Yee's Table is related to the motivations of discovery and escapism.

The motivation *discovery* is connected to the possibility of exploring, which appeared in the emergent open-world storylines of early *Multi-User Dungeon* games (MUDs) and in modern online 3D worlds like *World of Warcraft*, *Grand Theft Auto* or *Assassin's Creed*. But in *Urgent Evoke,* discovery was not about finding hidden treasures or the secrets of Paris during the revolution: it was about discovering state-of-the-art scientific and practical knowledge about global challenges, discovering the resources of other players and last but not least, discovering one's own personal interest in and capacities for becoming a post-game social innovator. In that sense, *UE* challenges our understanding of *discovery* in games. And as the data presented show, this is exactly what motivated the players to play. They entered *Urgent Evoke* because they saw in the game a chance to learn, develop and discover new knowledge, what it means to be a social innovator and how a game can generate bottom-up social change.

Escapism is connected to the idea that games offer players a possibility to escape the realities of physical life and flee into a fantasy world. Huzinga said in 1938 (Huzinga 1938) that games are played in a magic circle – a space where the laws of nature are revoked. But in 2005, Castronova told us that the magic circle has become perforated and that our online and off-line lives are blending. In *Urgent Evoke*, the demarcation line between the game and physical reality is breached, which is expressed in the World Bank's description of the game as '*an imagination-infused reality*' (Gaible and Dabla: 7). In addition, the game designers asked players to play themselves: '*This [the game] is not a simulation. You are about to tackle real problems*'(See Chapter 2). Even if some players might use the game as an escape from unfinished studies, the stresses of work, and arguments with friends and family or other maladies of everyday life, what they 'escape' to is an encounter with some of the most wicked problems of our time.

Having said that, this encounter was mediated in *UE* because it still took place in a 'Magic Circle'. While that circle was perforated, it still ensured that the immediacy of everyday problems decreased. Furthermore, the mediation ironically enabled players to escape the 'imagination-infused reality' of the game as players could turn their backs to the problems presented in the game, leave the magic circle and go back to their ordinary lives in the physical world at any time. None – except one - of the winners interviewed expressed a motivation for playing because the game offered an escape. Instead, they saw the game as a chance to think about, discuss

and actively engage in socio-political issues. I therefore argue that the *UE* winners were not motivated by escapism, but by the chance to try to make sense of some of the physical world's most wicked problems in a controlled way.

The goal of the game was to empower players to become post-game social innovators. I think the design of Urgent Evoke created an *opening* for that to happen because despite its formulated goal, it enabled many different forms of motivations to live side-by- side in the game. The data introduced above show us that the players made sense of the game in many different ways, as they themselves defined what the game means to them, e.g., a project development tool, a personal development course, a platform for self-expression or a community of similar interests. By having a game design that accommodated these different motivations and objectives, the World Bank succeeded in attracting players and engaging them in the game, which constituted an opening for getting players through the empowerment process that was intended to take place during the ten-week game period.

Analysis: Section Two

Empowered through a division of labour

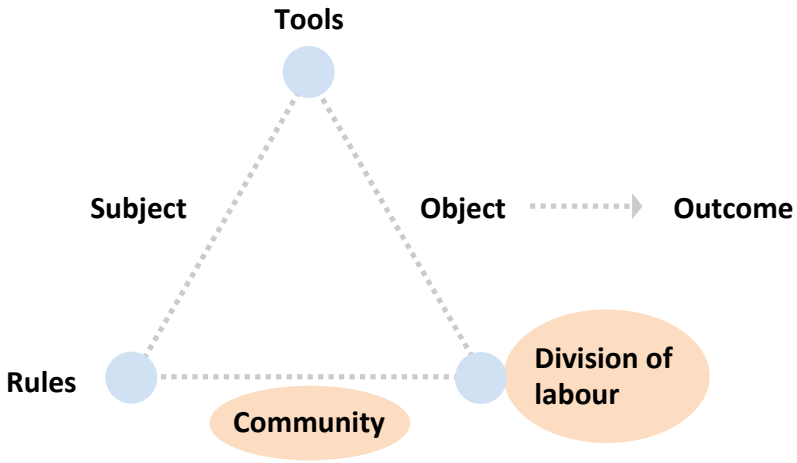


Figure 17: Reproduction of model of second GAT from Engeström 1987: 78. Highlights of Rules and Community by author

In this second part of the analysis, the focus is on how the player community and the division of labour of *Urgent Evoke* helped empower the winners to go all the way in the game and produce an Evokation, which indicated their interest in becoming post-game social innovators. From the perspective of Activity Theory, the point of departure for this part of the analysis is the bottom of the triangle depicted Figure 17 above, where we find the elements of *Community* and *Division of Labour*.

As the Figure shows, the seven concepts (subject, tool, community, etc.) are connected, and there is a dialectical relationship between them.
These relationships are theoretically interesting, but empirically challenging to work with. It is equally difficult to devote attention to all seven concepts at the same time, as it is to discuss one without touching upon several of the other concepts. Me making the methodological choice of anchoring my focus in Community and Division of Labour means that the analysis takes its point of departure from these two concepts in order to see how their dialectical relationship with the other elements creates openings for the empowerment of the winners.
This analysis draws on social network data derived from the *UE* platform and from the qualitative interviews with the players. *The social network data* is used to make different types of social network analysis that enables a discussion of if and how, e.g., the structure of the network and the position of the players within it provide the winners with access to resources that might have supported their development process towards becoming social innovators. The *interview data* provides us insight into the players' experiences with and sense-making of the network of players. Mixing these two types of data means that the analysis operates with two different understandings of the element 'community' in Activity Theory.

In the *social network analysis*, the community is defined as a structure that affords players with access to different resources (knowledge, acknowledgement and

practical help) depending on their position within the network, the number of connections to other players and the nature of these connections.

In the *analysis of the interviews,* the community is seen as a multifarious, fluid phenomenon that emerges as a result of the meeting between a technology and its users and takes its meanings from the player's experience with and sense-making of the game.

These two different understandings of community should not be seen as competing with each other; instead, they should be seen as collaborators who together provide us with a multifaceted description and understanding of how the *UE* player community influences the development process of the winners.

I begin this section by introducing the player community through a social network analysis made on the total network and on the network of the winners.
After discussing the network data and what it tells us about the player community and the division of labor within the community, I move to the winners' experiences of what it meant for them to be part of the community.

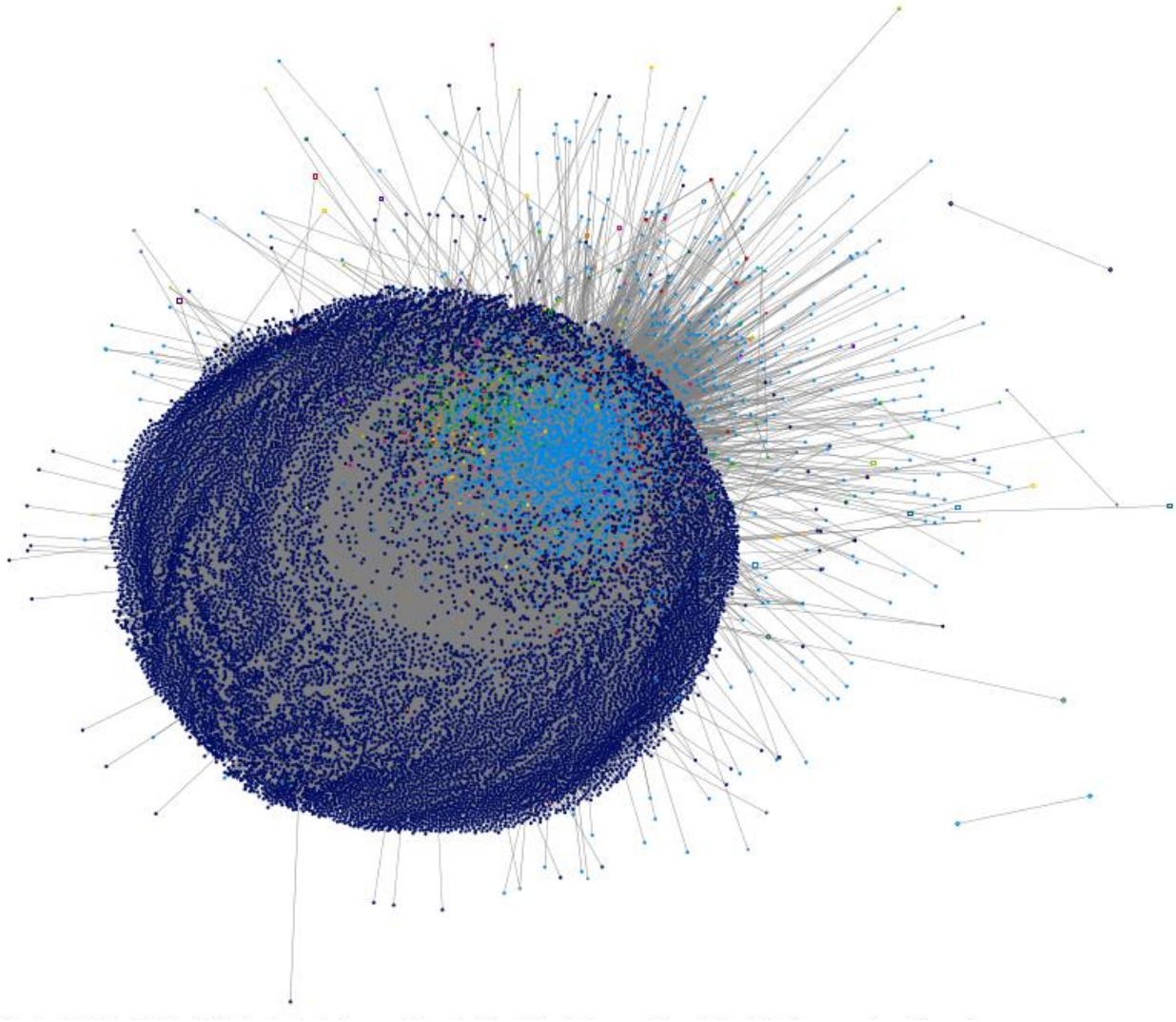


Figure 18: Visualisation of the Urgent Evoke *player network created in NodeXL, from the Social Media Research Foundation, http://www.smrfoundation.org*

The Network – macro-level

The visualisation in Figure 18 above shows a globe-shaped figure made up by little dots (hereafter referred to as nodes) in different shapes and colors connected by grey lines (hereafter called ties). Every node represents one of the 17,574 individual *UE* players included in the data set. Isolates - players without any ties – have been excluded from data set, which is why the number of players/nodes stated here is lower than the number stated in the official evaluation of the game (Gaible and Dabla 2010).

The network is an undirected network, which means that there is no information available about, e.g., who initiated the contact between two nodes or who followed whom. Of the 36 winners named by the World Bank in the official evaluation (Gaible and Dabla 2010), I have been able to identify 31 who accepted their awards. All of these 31 winners are included in the social network data set with the exception of Gutekunst, who had closed his account post-game.

I asked NodeXL to automatically identify clusters based on the network structure (Hansen, Shneiderman and Smith 2010). The algorithm then:

> *looks for groups of densely clustered vertices that are only loosely connected to*

> *vertices in another cluster. The number of clusters is not predetermined; instead the algorithm dynamically determines the number it thinks is best. Each vertex is assigned to exactly one cluster, meaning that clusters do not overlap.*
> (Hansen, Shneiderman and Smith 2010: 95–96)

The algorithm identified 87 clusters of varying sizes. The largest consists of 14,858 nodes, the smallest consists of two.

The clusters in the visualisation can be identified by the color and shape of the nodes. Two clusters – the dark blue and the light blue – dominate the picture. Together, they constitute 16,997 of the 17,574 players included in the data set, leaving 557 players to be divided between the 85 remaining clusters. Together, the dark and light-blue clusters also give the network a core-periphery structure, where the light blue network becomes the core surrounded by the larger dark blue network. There is a clear distance between the two networks – only in the upper right corner are they tied together more closely.

Taking a closer look at the information about the clusters reveals that all of the winners identified are included in the light blue cluster. This is interesting because it tells us that the winners are connected; it could also indicate that there were resources available in this part of the network that helped empower the winners to such an extent that they decided to make an Evokation.

The light blue network seems to be densely knit with a fraying edge and a greater distance between the nodes. This network seems to have an eruption of nodes with only one or a couple of ties to the network in the upper right corner.

When the *degree*[21], *betweenness centrality*[22] or *eigenvector centrality*[23] are calculated on the overall network and a 'top 100 list' is made for each of the calculations, I yielded the following results:

[21] The number of direct connections to other nodes a node has.
[22] A measure of how often a node lies on the shortest path between two other given nodes.
[23] A measure that tells us how well-connected the connections of a node are. In other words, node A with few direct connections could have a higher eigenvector centrality compared to node B, which has many direct connections if the few connections of node A are better connected that those of B. The idea is that it is more valuable to be connected to a well-connected node than to a less-connected node

Degree Centrality / Top 100	Betweenness Centrality/ Top 100	Eigenvector Centrality/ Top 100
Number of winners included = 12	Number of winners included = 14	Number of winners included = 13
Astrid Anni Michael David Henry Eric Allan Rene Flemming Jonas William Martin	Astrid Anni Michael David Henry Eric Allan Rene Flemming Jonas Laura Martin Tom Karen	Astrid Anni Michael David Henry Eric Allan Rene Susanna Herman Laura Jasper Tom

Figure 19: Table showing the winners included in three Top 100 lists calculating different types of centrality. The lists are calculated in NodeXL, from the Social Media Research Foundation, http://www.smrfoundation.org.

The calculations show that the winners are over-represented in the top 100 lists. While the winners represent 0.18 percent of the overall network, in the top 100 lists they represent 12–14 percent. A total of 18 of the 31 players identified in this thesis are on the lists, and eight of them are represented on all three lists.

The number of winners on the three lists indicates that there is an over-representation of winners among the players with many direct ties to other players, with well-connected ego networks and with good positions when it come to betweenness centrality.
I can only speculate about what leads to the formation of these clusters. But based on this initial analysis of the overall network, I find it interesting to focus more on the light blue network because I believe that it is in this part of the network that the winners found most of the resources that empowered them to send in an Evokation and aim at becoming post-game social innovators.

The Network – meso-level
As all the winners are included in the light blue network, I am interested in learning more about the structure of this sub-network and the winners' positions within it. I have therefore created an edge list with all the players included in the light blue network.

The light blue network consists of 3,594 nodes and as the visualisation below shows, it has a clear core-periphery structure with a densely knit core and a porous edge.

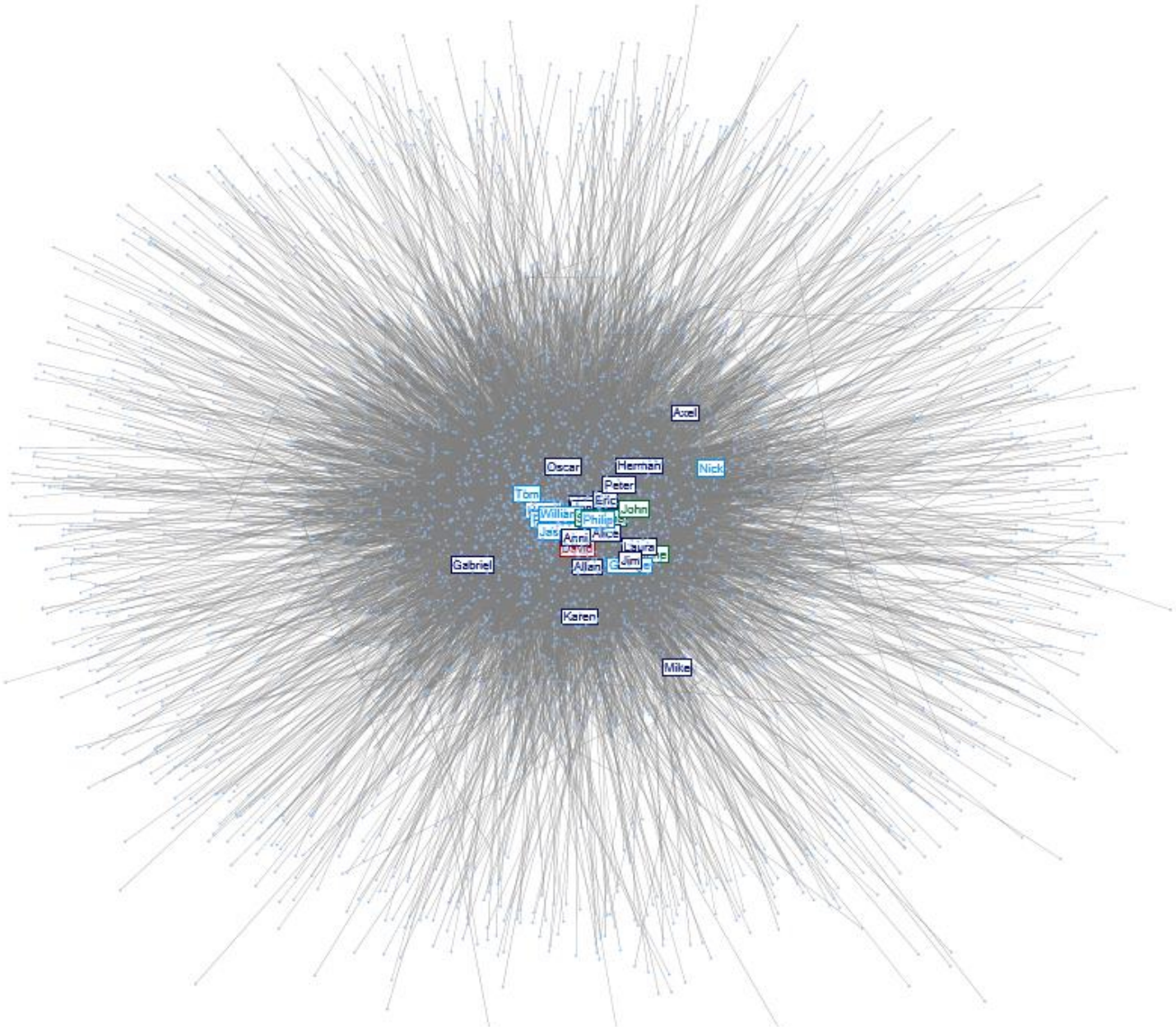


Figure 20: Visualisation of the light blue sub-network of Urgent Evoke *players created in NodeXL, from the Social Media Research Foundation, http://www.smrfoundation.org.*

In this visualisation of the light blue network, the winners have been identified and are nearly all placed in or near the core of the network, with the exception of *Nick*, Axel and *Mike*, who have more intermediate positions.

Once again, I made a calculation of the *degree*, *betweenness* and *eigenvector centrality*. And again, the winners are over-represented on the lists showing the top 100 of all three types of centrality measures:

Degree Centrality / Top 100	Betweenness Centrality/ Top 100	Eigenvector Centrality/ Top 100
Number of winners included = 12	Number of winners included = 11	Number of winners included = 14
Astrid Anni Michael Flemming Jonas Henry Allan Eric Rene David Martin William	Astrid Anni Michael Flemming Jonas Henry Allan Eric Rene David Martin	Astrid Anni Michael Flemming Jonas Henry Allan Eric Rene David Martin William Jasper Tom

Figure 21: Table showing the winners included in three Top 100 lists calculating different types of centrality. The lists are calculated in NodeXL, from the Social Media Research Foundation, http://www.smrfoundation.org.

A total of 14 of the winners are represented on at least one of the lists, and 11 of them on all three lists. The winners represent 0.86 percent of the light blue network, but they constitute 11–14 percent of the players on the three top 100 lists.

The winners on the top 100 list for degree centrality are identical to those in the degree centrality for the whole network. The winners represented on the top 100 for betweenness centrality are a bit different: 11 are the same, but *Laura, Tom* and *Kolek* are missing. And on the top 100 list for eigenvector centrality, 10 winners are the same, *Susanna*, *Herman* and *Laura* are no longer included, but *Flemming, Jonas, Martin and William* have entered the list.

Thinking of the analysis of the overall network showing that all of the winners positioned in the light blue network, and now seeing 45 percent of the winners represented in the three lists above is a strong indication that the winners had a disproportionally good access to the resources present in the network.

The Network – micro-level

The following graph shows the ego-network of all the winners. An ego-network is the network made up of an individual node's direct ties. This visualisation is a representation of the network made up of the winners and their direct ties. This network consists of 1,305 nodes. In the visualisation of the network provided below, the winners' positions have been highlighted. I call the network 'the winner-network'.

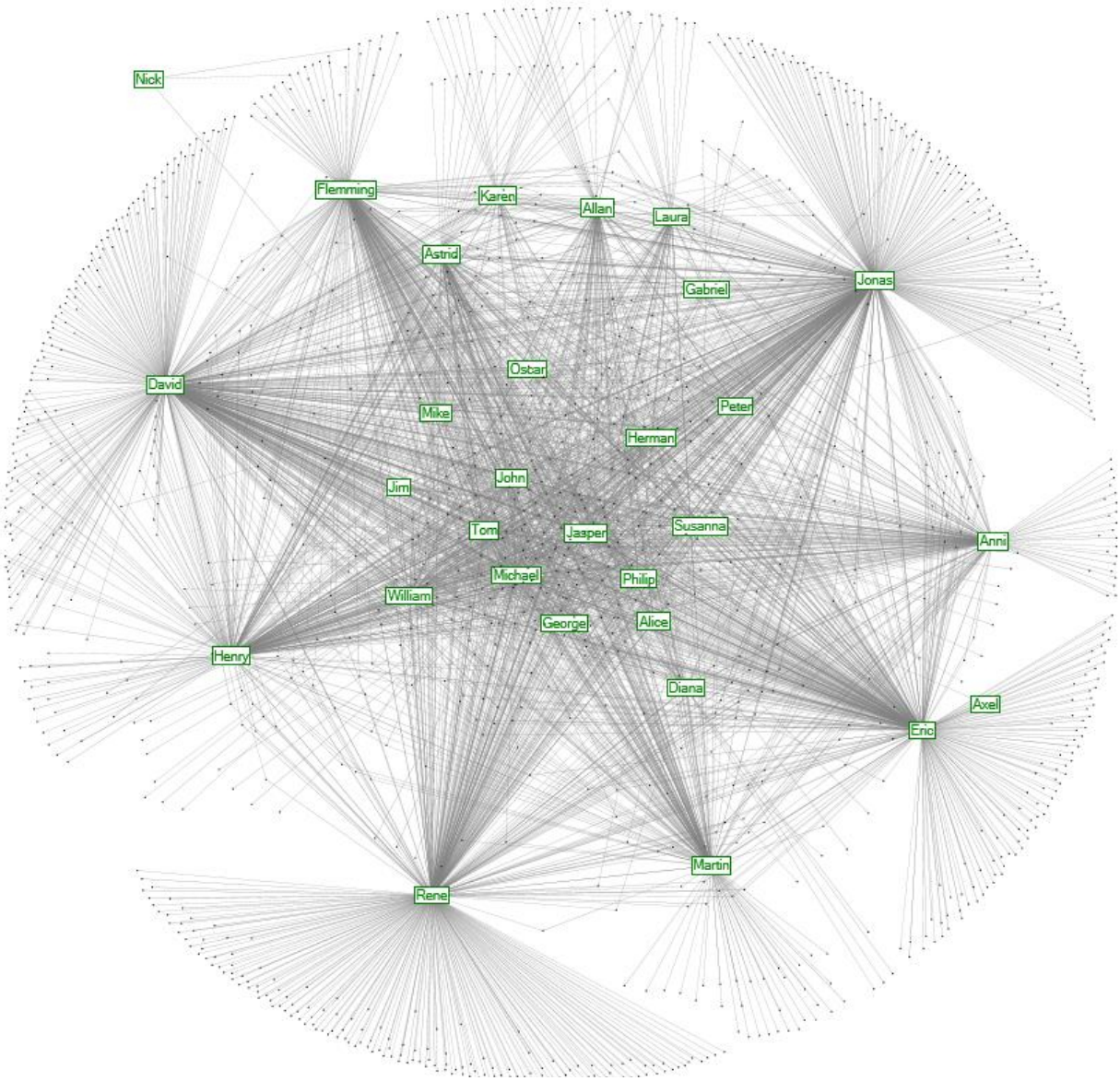


Figure 22: Visualisation of the winner netowork created by the author in NodeXL, from the Social Media Foundation, http://www.smrfoundation.org

We learn from the visualization that the winners are relatively closely tied together (except *Nick*), which is a confirmation of what the analysis of both the overall network and the light blue sub-network indicate.

The visualisation also depicts a core-periphery structure, where some of the winners are centrally placed in the densely knit middle, while others occupy a more peripheral position. But it is important to remember that the winners' network is a sub-network of the light blue network, which is itself a sub-network of the overall network. This means that what seems to be a peripheral position in the winners' network should probably be seen as an intermediary position or as a bridge-building position, because the winners network is embedded in other larger networks.

Located in the center of the winner network are *Michael, Jasper, William*, *George* and several others. Characteristic of their position is that they have a high degree

centrality or eigenvector centrality within the network. Being at the center of the network is associated with access to resources flowing in the network (Borgatti and Everett 1999). But the players in the center are also dependent on the players who take a more peripheral or intermediary position, as it is these players who are connected to the surrounding world and who can bring in new resources to the network.

Players like *Martin, Jonas, Eric, David, Rene* and several others hold an intermediary position, which means that they are well-connected with the core as well as the periphery. Their position is also seen as advantageous because they have access to information from the outside and because they have the recognition of the core players (Cattani and Ferriani 2008; Frederiksen and Dahlander 2011).

Axel and *Nick* stand out in the graph because they are on the edge of the network. *Axel's* network consists of only two ties. One of them is to *Eric*, who is a very central player; in fact, he is represented on all three Top100 lists. It is *Axel's* tie to *Eric* that connects him to the winners' network.

Nick is the rare bird in this story because he has only three ties and none of them is with any of the other winners. *Nick* is part of the light blue sub-network, which I see as a more resourceful network. However, he played his game without being really embedded in the network. *Nick* shows that establishing connections and securing a central position in the social network of the game is not always necessary to winning the game. I return to *Nick* and *Axel*, among others, later in the analysis when I discuss the 'lone wolves' among the winners.

If we go a bit deeper into the analysis of the network data and clean up the data from the winners' network even more in order to show only the edges between the winners themselves, the following image is made possible:

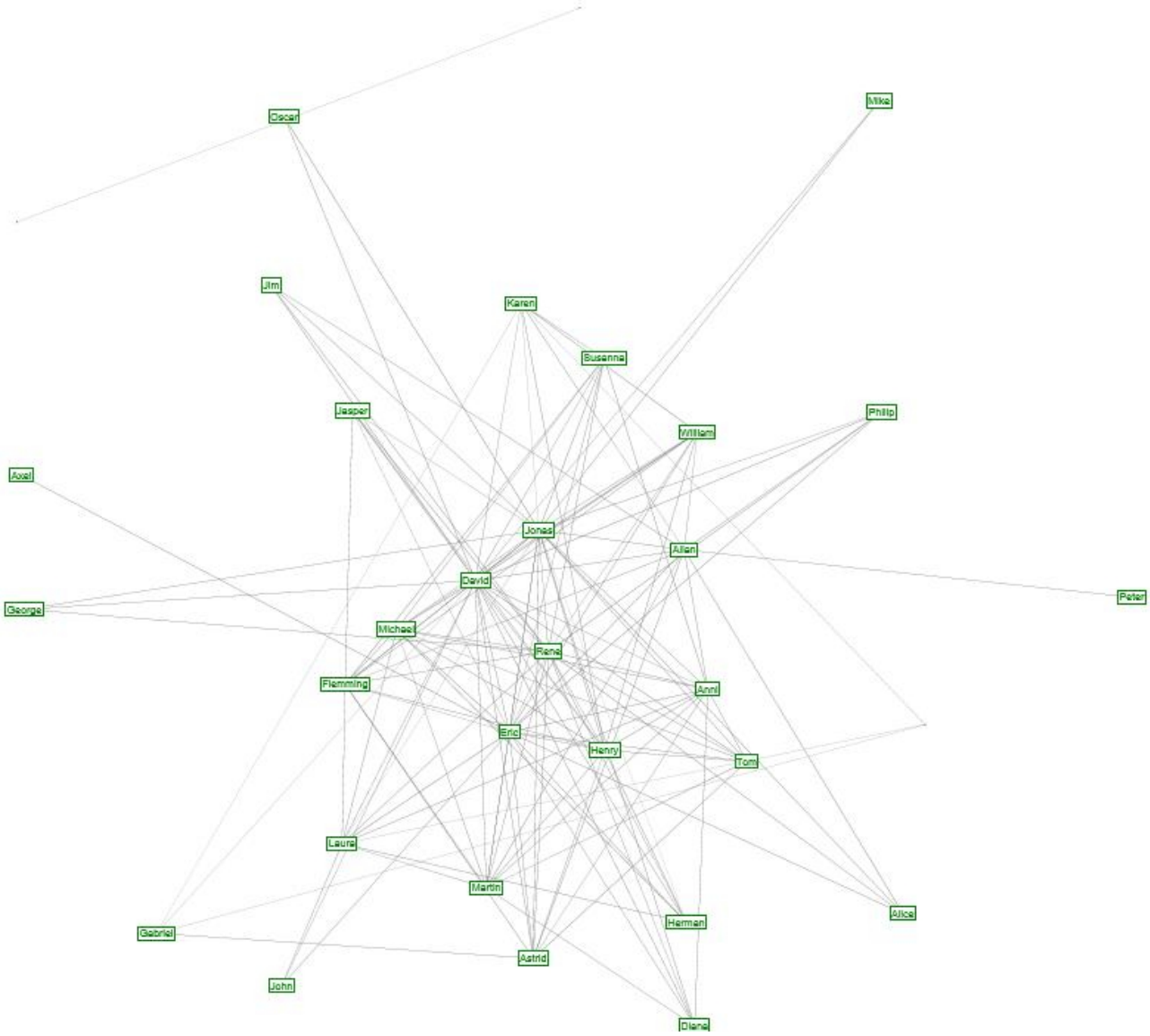


Figure 23: Visualisation of the winner's ties with each other created by the author in NodeXL, from the Social Media Research Foundation, http://www.smrfoundation.org

What the visualisation confirms once again is that the winners are well-connected among themselves and that their network has a core-periphery structure. Most of the winners are connected to at least three other winners – again with the exception of *Nick*, who is not connected to any of the other winners at all. This means that resources could be exchanged quite easily among the winners.

The different social network analyses made above have shown me that the structure of the network and the winners' positions within it positively influenced the winners' development process. The resources were pulled together in the light blue network; being part of that sub-network was advantageous to the winners. Zooming in on the winners' network shows that the winners occupied many different positions within the network. This can also be understood as a form of division of labour among the winners. Some, for example, occupied central positions in the network by bringing people together and enabling a dissemination of information and other resources. Others had many bridging ties and ensured

that new resources where brought into the network. Together, the players wove a network of ties that helped them go all the way. They had different tasks to perform, which benefited themselves and other winners.

But it is one thing is to be able to look at the network from a meta-position where overall structures become visible. It is another thing altogether to be embedded in the network and experiencing it from the ground up. That is the perspective I apply in the following section, where I discuss the player community and the division of labour among the players. In this section, winners talk about how they experienced the player network, the positive influence it had on their game play and their decisions to turn in an Evokation. I introduce five different 'jobs' performed in the player community (ambassadors, the like-minded, inspirers, cheerleaders and helping hands), jobs that the winners think supported their game play. Finally, I discuss the winners who were not embedded in the *UE* network or who experienced themselves as 'lonely wolves' in the community.

The Ambassadors

In the first part of the analysis, the focus was on the winners' motivation for playing *Urgent Evoke*. In some of these stories there appeared a person who had introduced the winners to the game and suggested that they should play. This was the case with *Alice*, who told us how a friend had asked her to play because he was interested in her opinion of the game. But *Alice* is not the only player guided to the game by people in their social network. The same goes for *Tom, Allan, William, Susanna* and *Gabriel*. All six players found their way to the game because someone thought that it would be interesting for them. In the case of *Alice*, the person who introduced her to the game wanted to hear her opinion about the game because she has professional experience with development issues. *Tom, Allan, William, Susanna* and *Gabriel* were introduced to the game because someone altruistically believed that they would enjoy it and be able to learn from it.

In the cases of *William, Gabriel, Susanna* and *Allan*, friends informed them about the game. *William* reported:

> […] what I remember is that a friend of mine saw this ad for it and send it to me in email and said, 'Well, I saw this game and thought you would probably be interested. (William)

Susanna spoke of how another development worker in the Philippines whose husband works for the Asian Development Bank drew her attention to the game:

> *Ann just showed me because it had come on to her husband's desk I suppose, by the World Bank […], and yeah, she said that 'This could be something for you and your kids* [Susanna's pupils at the school where she teaches]. (Susanna)

Gabriel's story is about a friend introducing him to a video about the game designer Jane McGonigal:

> *At that time I was at college and I was working on a project about social innovation and a friend showed me a video about Jane McGonigal, the game designer, telling about* Urgent Evoke *and I thought it sounded interesting and I decided to apply to see what happened and that is the way it started and I kept going and going to the end*. (Gabriel)

Allan's friend suggested the game because she was aware of his self-development interests. She had learned about the game from an article on CNN:

> *I have a friend […] and she had seen a CNN article about it and recommended that. She thought that it was something that I would enjoy doing* […] *And she knew that my mind had been more kind of like a buffet. I had never really focused in on anything. I had more like – 'ohh, that is kind of interesting', but I never did anything with it. So she recommended it as a chance for me to focus in, express my thoughts and dig a little bit deeper.* (Allan)

Tom's story is a little bit different. He was introduced to the game by his mother, who he describes as much more Internet-savvy than *Tom* himself. He says,

> *So my mother found out about the game and said hey, this is something that you might be interested in trying out, it seem pretty much in line with your interests [….]* (Tom)

Tom's mother not only pointed him in the direction of the game, she also played it herself. Although she never reached the end of the game, she kept on encouraging her son:

> […] *my mother didn't stick to it towards the end, but she was still around and she was aware of it and could still push me and be like 'yeah, you should really finish that', and she could help me out […], so having someone there who was real to sort of share the experience with and have to push me was also really helpful.* (Tom)

What these six stories demonstrate is that people loosely connected to the game, who have seen, heard about or perhaps visited the game, can influence the players' development process by choosing to become a sort of 'self-made ambassador' for the game. What these ambassadors have in common is that they used the information gained about *Urgent Evoke* and the knowledge they had about the interests of their friends/family members to connect the technology and the players-to-be. In my social network analysis, these ambassadors might not even be present in the dataset (if they did not register with the game), but had just visited or passed on information they had received from another source, e.g., the television or TedTalks. If they had registered in the game, they would have had a very peripheral position in the network, as none of them except *Tom's* mother seems to have been very active players themselves.

But from a very peripheral position or from having a very light connection to *Urgent Evoke*, these ambassadors played a very active and important role in the game because they helped others make sense of the game. They not only found the game, they also curated the idea that the game was worth playing by connecting it

to issues that were important in the soon-to-be players' off-line lives, i.e., their work, studies and self-development interests. They thereby helped empower the winners to take the first step in a longer process.
The ambassadors also played an important role in the division of labour, even though their connections to the player community were light. None of the six ambassadors except *Tom's* mother would have left any visible imprint in an SNA analysis, but they all left an imprint in the winners' experiences of what helped them find their way into *Urgent Evoke*. Without a little help from these ambassadors, we might not have seen *William, Gabriel, Susanna, Tom, Alice* and *Allan* on the player list.

The Like-minded
Zooming in further on the *Evoke* network, we see the people in the network who participated by liking, sharing and producing content for others to see. In this section, winners tell us what it meant to them to be part of such a network.

Jonas stressed the importance of the social network:

> *I think that is the strongest characteristic of this game: that it connects you with other people that are interested in the same things that you are interested in […] I think it is very empowering in the sense that it connects you with people that are really thinking in the same terms that you are thinking, at least the issues, the solutions might be completely different, but the awareness and the willingness to change certain subjects. I think that is very empowering to meet them*. (Jonas)

For *Jonas*, the meeting with other like-minded people was an empowering experience. He did not describe exactly what he means by empowering, but later in the interview he talked about how the game, besides setting up shared objectives for the players, succeeded in creating:

> *[…] this real sense of global community and […] the sense of hope too […]' Knowing that other people share your concerns and (are) working on similar solutions for these challenges that we face collectively as humanity, […] is very encouraging […]* (Jonas)

Jonas indicated that being part of a global network focused on the same goal and being willing to try to make a positive change filled him with hope and encouragement that it is possible to develop solutions to some of the world's most wicked problems.

Jonas is not alone in his opinion that the game helped the players form an international network working on a shared objective. *David* said:

> *[…] we actually developed some of the network with people around the world, who were actually working for the same objective or who had same kind of mission or goal to contribute for overall humanity and international development.* (David)

Like *Jonas, David* highlighted the shared goals or objectives formulated by the game

designers as important for the development of a player network. This way of connecting the emergence of a player community with the game design is underlined by *Anni's* description of the game:

> *I was always looking for a community to be a part of,one which focused on globally inspired activism in a positive way. It's hard to find on the Internet. Certainly you can find other activists, but they generally aren't in a community working together and sharing goals, and it's even rarer to find a place that's encouraging learning and exploring while also focusing on doing practical things.* (Anni)

The picture that the three quotes above produce together is that of a technology that attracts and brings together people who share an interest in socio-political problems and provides them with a shared goal that gave them a feeling of being part of a community. And as *Anni's* statement underlines, *Urgent Evoke* is a rare kind of social medium because it does not just encourage its users to talk about their shared interests, it actually encourages them to take action collectively. Furthermore, this call for action is supported by a game design that promotes and enables collective learning, exploration and practical efforts.

Jonas and *Anni* used the words 'empowerment' and 'encouragement' when they described what the game meant to them. In the following quote, *Axel* described how being part of a community of like-minded people empowered him to start sharing and developing his social innovative ideas:

> *I mean, perhaps it is just me individually but you know the thought of going to people and [saying] 'I have got a solution that can change the world for the better' is, you know, quite an audacious thing to go out and say, especially if you are a bit introverted like I am. It is only by speaking to other people who have the same, what is the word, inclination, and would like to be able to do that as well that you realise perhaps that it is more selfish if you have a good idea not to do it, than it is to go for it.* (*Axel*)

Axel talked in his interview about how growing up in Zimbabwe as a white kid. Seeing a lot of poverty around him caused him to think that he should do something to make a positive change in his country. But *Axel* also described himself as introvert and the idea of saying out loud, 'I am a social innovator and I can make a positive change' was audacious to him. But on *UE,* he met people who declared their social-innovation intentions openly, which gave him the courage to raise his voice both in the game and in the end by turning in an Evokation.

As we shall see in the third section of the analysis, the feeling of being empowered and having the courage to raise his voice is something that *Axel* took with him out of the game and into his physical life. But for now, *Axel's* example shows us that the impact of being among like-minded people is not only that it generates a shared feeling of community, hope and a capacity for action. It also can generate a change in an individual player's self-image, giving them the courage to raise their voice, share their ideas and pursue their pre-existing intention of trying to create positive social change in the physical world.

I would like to end this discussion of the social network of *Urgent Evoke* as a meeting between like-minded people with a quote from *Peter*. I have chosen to include this quote because it calls attention to the fact that the social network of *Urgent Evoke* was born with an element of temporality, at least in the form that the network had during the game. When the time ran out on the project, the idea that the player community would scatter was perhaps just as scary an idea to the winners as the initial formation of the network had been encouraging. In the quote, *Peter* is referring to the *Evoke* Summit that took place at the World Bank's headquarters in Washington, D.C. after the game had finished:

> […] *leaving Washington, it was a bittersweet moment because I felt I really had a connection to these people. You know, I think the game definitely brought us together – although we approached the game in very different ways, the fact that we all completed it with an Evocation, we had some things really in common. I think we connected around those things. So it was like, I was happy to go home back to my family – it was tough being away from them, but leaving these folks that where like kind of kindred spirits I think in a sense, was tougher.* (Peter)

Note that *Peter* refers to the network of players as a network of kindred spirits. He feels connected to these people, and even though he missed his family, he found it difficult to leave Washington, D. C. and say goodbye to the *Urgent Evoke* player community. I return to this temporality later when I discuss why it was perhaps difficult for some of the winners to transfer to and implement their Evokations in the physical world.

The inspirers

In the previous section, the network of *Urgent Evoke* was characterised as a network of like-minded people, and the idea of sharing a goal and producing content collectively provided the winners with encouragement and hope that helped them progress through the game. But the collective exploration of centrally formulated issues also meant that players could use each other for inspiration and mutual learning. Some of the winners expressed that to them the game was to a great extent about learning from others.

William entered the game because of the network, which he believed would provide him with a learning opportunity:

> *I thought there would be many people joining with different kind of expertise, so actually I hoped to learn from them.* (William)

David also felt that a central point of the game was to look at what others were sharing, and to learn from and engage with it. When I ask him how often he entered the game, he said:

> *I think every day to see other responses, because the interesting thing about the game was not how you were contributing. The interesting thing was to see others, and learn from their approaches and to challenge them, and you know, give them feedback.* (David)

Like *William* and *David*, *Alice* also became inspired by looking at what other players produced in the game. She said:

> *I was taken by people's miracles and to what extent some went into remote areas to help others […] all of the stories were impressive and it took me by surprise what humans can do and how they can break the barriers and go and try where other people failed. I used to feel special and talented, but when I looked at what others were doing, I felt that there was so much power in others and that it was beautiful to make the changes that I or others are not strong enough to do.* (Alice)

Alice used the words *miracles, impressive, break the barriers, power and beautiful* to describe what she experienced when she looked at what other players produced in the game. She also related how the game influenced her view of herself: she used to feel special, but during the game she saw much power in what other players were doing. This might suggest that *Alice* became a bit overwhelmed by the experience, as if the game took away some of her self-confidence. But I do not think that that was the case. Perhaps *Alice* was surprised by what she saw, but she found it beautiful to experience the strength of other players and felt hopeful that positive change can happen even in remote areas where she is not able to make a difference.

I see a change of perspective in *Alice's* story. While before the game she felt special and therefore also alone ('being special' meaning that there are not many people like her), the game gave her the feeling that there are many people like her who are willing and have the capacity to try to change the world for the better. *Urgent Evoke* might have shown her that she is not special, but it also showed her that she is not alone. She could now draw on and learn from the work of other players:

> *Sometimes before I submitted my answer or case study I'd go and visit other popular leading players' input…with that I learnt a lot …I was impressed with the diversity of achievements around the world.* (Alice)

Like *Alice*, other of winners were inspired by looking at what other players were doing. *Peter* described how seeing what other people were doing filled him with energy and inspired him to develop his own ideas:

> *I was exposed to a lot of ideas I had never thought out and then out of that I generated some ideas that I had never thought about and that really energized me.* (Peter)

Peter often played in the evening and remembered how he sometimes became so excited by the game that he had trouble falling to sleep afterwards. *William* was also inspired by the work of other players, but what he underscored is the impact of the cultural differences between the players:

> *Because you know the quests were the same for everybody, but from someone in Mexico and someone in India and someone in Australia and the UK and South Africa and comparing all these different, you know, opinions and*

> *experiences with mine, was a treasure. It was something that you can't get in one day and yet during the game we had access to everybody's knowledge at the same time.* (William)

William found it 'a treasure' that the game design provided him the opportunity to access a multifaceted environment where different perspectives thrived and ideas co-evolved. He clearly saw this as enriching to be able to challenge his own ideas by being part of a large international online community that brought people's ideas together in spite of the fact that they live in different parts of the world.

In these descriptions, *Alice, Peter* and *William* described how it influenced them in a positive way to have access to a huge international environment where people are working on the same assignments but in different ways. There was no person-to-person contact with other players; *Alice, Peter* and *William* were describing how looking at the work of others fed them with new ideas, energy and hope.

But not all players got their inspiration from the large social environment of *Urgent Evoke, Tom* said:

> *I think that I very much like personal face-to-face connection, and so during the game there was networking going on and like you communicated through the game and built sort of a community there. But I didn't really, you know, I gained much more from 'here is a particular person who I like really sort of respect and have an interesting connection to', not this overall like 'here is this worldwide group of people that I know just through the internet*'. (Tom)

What *Tom* is saying here is that he had no interest in the overall network of *Urgent Evoke*. He did not ascribe any meaning to being connected to a lot of people that he did not have personal contact with. This approach to the game and the player community is also mirrored in *Tom's* ego network, which consisted of 69 contacts, a relatively low number compared to most of the other winners.

Tom's interest in more personal contact does not mean that he did not use the access to the player community that the game provided. As the quote below indicates, *Tom* also spent some time keeping track of what other players produced in the game, even though this was not something that inspired him in his own work or his development in the game. That is, until he came across one of the other winners called *Martin*:

> *[…] basically halfway through the game he [Martin] posted a video of making his own windmill and getting some electricity of his roof and I thought that was pretty cool. As an engineer I thought that was pretty interesting, so I started talking to him and it turned out that he was fairly local so we ended up getting together in person and chatting a bit a few times and continued to talk in the game and being very attentive to each other's blog posts, giving feedback and that sort of thing.* (Tom)

What *Tom* described was his finding one player in *UE's* vast community whose work inspired him. He was attracted to *Martin's* ideas because they related to his

own engineering interests, so he instigated contact. Because *Martin* and *Tom* live near of each other in the physical world, their in-game contact led to a couple of encounters off-line. The development of their contact in the physical world translated back into an attentiveness towards each other during the rest of the game play. *Tom* was inspired by *Martin*, but the inspiration was enhanced by virtue of their off-line contact.

We can see from the winners' descriptions of how other players inspired them that inspiration comes in many forms, and that the players usee and made sense of the player community in many different ways. As the social network analysis showed earlier, some of the winners built large in-game social networks, while others had just a few contacts. The analysis just made indicates that these differences might have more to do with personal choices and ideas about when social networking makes sense than with the game design. *Urgent Evoke* offers its players an opportunity to meet and connect with other players from all over the world, but the game did not force its players to be social in a specific way. The players quoted above tell us that they were all looking at the content produced by others who were working on the same missions and quests as they were. Doing this inspired them and gave them hope that change can be made even in areas where others have given up. It also introduced them to new ideas and provided them with access to a range of culturally different perspectives on and experiences with the topics treated in the game. It is therefore fair to conclude that even though only 73 of the 19,386 registered players turned in an Evokation, 6,618 completed at least one mission or quest during the game play and delivered content that possibly inspired other players, perhaps even the winners.

The cheerleaders
Several of the winners talked about how the feedback they received from others during the game meant a lot to their game play and in their decision to turn in an Evokation. But as the following analysis shows, the feedback meant different things to different players.

Let us start with a quote from *Jasper*, who said:

> *I think there were a couple of conversations with some individuals, with some of the people on the list that I showed you [a list of names with the players included in Jasper's in-game social network]. I think that was pretty helpful because in the beginning I was kind of like confused about how to get started with it, and a couple of encouraging comments and the conversations that followed were helpful.* (Jasper)

Alice described a similar experience:

> *I just wanted to collect tokens….and close the entire bar per sector, but slowly I started to see the social economic and political values …and how my shared best practices were getting noticed, complimented, and reacted on ….* (Alice)

Alice described how her first goal in the game was to close the bar on her personal page showing how many badges she had been able to collect. (Badges are given for

different accomplishments in the game such as completing one's first mission, and having the game designers choose one of your missions or quests as the favorite of the week.) She had succeeded in getting five of the six available badges. But she then received feedback from other players that she should engage with the game changes, and began to see the game as a social and political tool that could have an impact on other players. For both *Jasper* and *Alice*, the interaction with and feedback from the community of players helped them make sense of the game. Being complimented and receiving positive feedback gave them a sense of direction and a sense of how to play.

Besides helping to figure out how to play *UE* and realise the games socio-political potential, feedback from other players also helped some of the winners overcome challenges in their physical life while they continued on to the end of the game. *Laura* writes:

> *What kept me playing is the assignments became more and more interesting and people's feedback meant a lot and kept me distracted in a healthy way as I was struggling with a health issue.* (Laura)

At the time of the game, *Anni*, who had been homeless, was living with a family and helping with its children in exchange for accommodation. She said:

> *Peer pressure (community support) is always a powerful tool when it comes to being a little more courageous. (*Anni)

What these two ladies stressed is that the feedback helped them continue their game and evolve and share their social innovative ideas. *Laura's* health issues and *Anni's* homelessness could have prevented them from playing, but the feedback from other players provided them with enough energy and courage to go all the way and win the game – despite the challenges they faced outside the game.

Laura and *Anni* are not the only winners who talked about how the cheering and encouragement of their game colleagues empowered them. The following three players see the attention and feedback they received as the main factor that enabled them to turn in an Evokation and consider becoming a post-game social innovator.

William said:

> *I think I actually got encouragement from fellow players who said,' you know we think you should do an Evokation', and I was thinking to myself 'okay' […] I live in a community where I see very many challenges […] which one should I choose […?] Eventually I went back, looked all the posts I had been making and I realised I probably did well on food security and it might be a good place to start [….] But it was basically due to the initial comments and people giving me extra motivation to turn in a Evokation.* (William)

William lives in Uganda where there are certainly enough social challenges to deal with, but it was *Urgent Evoke* that provided him with the courage to actually

consider taking an active part in creating positive change. The fact that other players saw him as a potential post-game social innovator changed the way that he saw himself and motivated him to try to win the game. He also used the game – the missions and the quests he accomplished – to figure out what challenge he should take on outside the game. He chose to work with food security because he performed the best in this mission. For *William*, there seemed to be no difference between the in-game and out-of-game situation; he believed that performing well in the game and getting positive feedback there indicated that he would also be able to perform well post-game.
Axel, like *William*, was empowered by the attention that he received in the game, even though he did not talk about getting direct feedback in his interview. But he found that if he, an introvert, raised his voice, it had an impact on others:

> *As I said, personally I found it builds up your confidence that you do have a voice and you can actually make a change. I don't think I would have had the confidence to approach the prisons and do the work projects that I am doing now if I hadn't been through* Evoke. *(*Axel)

Urgent Evoke gave *Axel* a safe platform to exercise his voice. He gained confidence from the game, and the experience provided him with enough courage to approach possible collaborators post-game.

Allan has always liked to produce and edit video recordings of trips and family gatherings, an interest that he brought with him to *Urgent Evoke where he chose* to use video as a way to communicate about his missions and quests. He received positive feedback about his videos:

> *But the feedback that I got from people was – 'you are really good at that'. […] That was the biggest thing that I got out of the whole experience is that feedback of things that I was good at*. (*Allan*)

As we already know, *Allan* turned in an award-winning Evokation that was based on the idea that it is possible to empower people through the production of documentaries about their own life conditions. The experience of playing *Urgent Evoke* and the feedback he received there improved his self-confidence: he began to see himself as a filmmaker and social innovator. After the game, he chose to quit his job and start a production company together with the woman who introduced him to *Urgent Evoke*. Today, he makes his living producing films – a story we return to in the third section of the analysis.

So far we have heard how the winners felt empowered by the positive feedback they received from others. But some of them also expressed a desire to give as much back to the community as they felt they had received. *Jonas* said:

> *I think that is how I saw myself in the game, mainly. Like a cheerleader […] I thought that a lot of people were not getting a lot of feedback on what they were doing, so I just thought like, just saying a little bit, something very short like 'Great! It is looking good' and 'I like it'. It does help. Because I saw that that helped me […] So I thought this would be a good way to, like, empower as*

> *many people […] To make them trying to participate, to make them feel like they were a part of the game and make them feel, yeah, part of everything.* (Jonas)

In line with *Jonas, Allan* said:

> *I think as the game went on you also spent more time reading other people's work. That was something else that was important to me. You didn't want to be just someone who just created content, producing, but actually giving that same feedback.* (Allan)

All of the players above described how encouraging feedback and comments from follow players influenced their game play and their decision to produce an Evokation. None of them was very specific in the interviews about who these players were. What seemed to count is not *who* gave the feedback but the *content* of the feedback – and the fact the other people found what the winners had to say and show in the game interesting enough for them to spend time listening, looking and reacting. And as *William's, Axel's* and *Allan's* accounts underlined, the positive effect of being cheered on by others was not limited to the game. Such cheerleading can transcend the magic circle of the game and be transferred into the physical lives of these winners.

The helping hands

We have heard how attention and positive feedback empowered the *UE* winners. But in some cases the player community offered a helping hand in addition to the kind words. The game's design urged players to work together (see Chapter 2), and its mission statement suggested that players should ideally 'collaborate'. Some players did just that. *Jasper* said:

> *I think that there were a couple of times where I did a challenge with another player just to make things easier and faster, but for the most part I was relatively independent*. (Jasper)

Jasper gave the impression in this statement that even though collaborating in the sense that players agree to work together on the same mission perhaps does not happen all the time. But it does take place. Even an independent player such as *Jasper* tried it. He did not tell us anything about how the 'division of labour' functioned in these collaborations or how the collaborations affected the development of his Evokation, but he did tell us that his motivation for collaborating was to make it easier and enable him to work faster.

Whether *Jonas* also collaborated to ease his game play I do not know, but he did share a thought on how his collaborations during the game affected him:

> *I think [on the] one hand it [the game design] made me think more in terms of what project can I do myself and thinking more about what project can I do globally with all these people around the world.* (Jonas)

What *Jonas* expresses here is that the collaborations in the game changed his perspective on how to do projects in the sense that he no longer just thinks about how he as an individual can do a project, he now considers the possibilities of collaborating with other players/people around the world. What *Jonas* pointed out is that the social perspective in the game design and the collaboration that he experienced during the game provided him with a new understanding of how he could perhaps also create a social structure around projects he anticipates to do in the physical world. (I return to this discussion in the third section of the analysis when I discuss the post-game activities of the winners.)

Jasper framed his collaborations as a way of sharing the workload, and *Jonas* pointed to how the experience changed his way of thinking about a future project. Cronbrug provided us with an example of how *UE's* social network helped her pursue her goals during and after the game:

> Evoke *also offered me many of my higher needs: not only a community of people who were similarly interested in making the world a better place, so that I didn't feel so alone, but it also offered me that practical support that helped me in actually getting some material things accomplished (a website, some classes, postcards to promote the organization and its ideas, and some references for applying for grants for more workshops).* (Anni)

Anni described how the social network provided her not only with a sense of community, but also with practical help that enabled her to reach the goals she had developed during the game play. This story indicates that there were members of the player community who were willing to lend a hand to other players in order for them to perform as social innovators. Who these players are I do not know, but the data emphasise how the winners of the game were supported by the community on their journey towards winning the game and afterwards while trying to implement their ideas in the physical world.

We have focused in this second part of the analysis on how the player community in *Urgent Evoke* collaborated and how the winners where empowered in different ways by the community. But being true to my mixed method approach, I find it important not to create a monophonic analysis, but to strive for complexity and polyphony. Before wrapping up this section of the analysis, I would like to say a few words about some of the players who to a large extent did not use the social network opportunities provided in *Urgent Evoke*.

The 'lone wolves'

While *Urgent Evoke* offered its players network opportunities and even urged them to use them, not all players were interested in building an in-game network. *John, Tom, Peter* and *Diana* were four such players. They all – in different ways – talked about themselves as more or less 'lone wolves' in the game.

John did not build a large network during the ten-week game period. He said this was due to his lack of time:

> *My contacts with fellow players were at their minimum, due to lack of time, and my concentration on preparing the Evokation'.* (John) He also said about

> his contacts during the game: *they did not affect my contribution to the game or the Evokation.* (John)

John has not been in contact with any of the other players since the game ended.

John obviously did not see the added value of spending time building a social network in the game. He was very focused on the Evokation, and communicating with fellow players disturbed his work on the Evokation and cost him time. From his perspective, the social opportunities in the game were not a resource, they were resource takers. *John* had nine in-game contacts; two of them were also winners. Whether *John* initiated the contact or not, I do not know, but from what *John* has told, these connections had no influence on his Evokation. Why it is important for *John* to underscore his individuality as a player, I can only guess, but *Diana* might give us an idea. *Diana's* in-game network consisted of 35 connections; it is fair to say that she, like *John*, played a relatively individual game. *Diana* told me:

> *I play single player games so the only person I'm competing against is myself. It was, however, my plan to finish [*Urgent Evoke*].* (Diana)

In order to make sense of her social behavior in *Urgent Evoke*, *Diana* referred to her understanding of herself as a single-player gamer with a preference for competing only against herself. She based this understanding of herself on the type of games that she normally choses to play. But *Diana* was aware that in order to finish and perhaps win *Urgent Evoke,* she needed to accept the social side of the game. Nevertheless, for *Diana*, other players did not represent potential new resources (knowledge, experience, ideas, helping hands, etc.): they were defined as competitors.

Very few of the winners talked about the competitive element of *Urgent Evoke* that *Diana* seems to represent. In *UE's* design and in the discourse surrounding the game – created and maintained by the designers as well as by most players – the social network and collaboration among players were accentuated. For example, the World Bank did not talk about 'the winners of the game'. When the winners were announced, the headline of the blog post was 'Evokation Prizes' and Robert Hawkins, Executive Producer of Urgent Evoke says, 'Greetings EVOKE agents! I'm very pleased to announce the agents and agent teams selected for the various prize categories'. The word 'winners' was very elegantly avoided and a sense of community and equality was preserved.

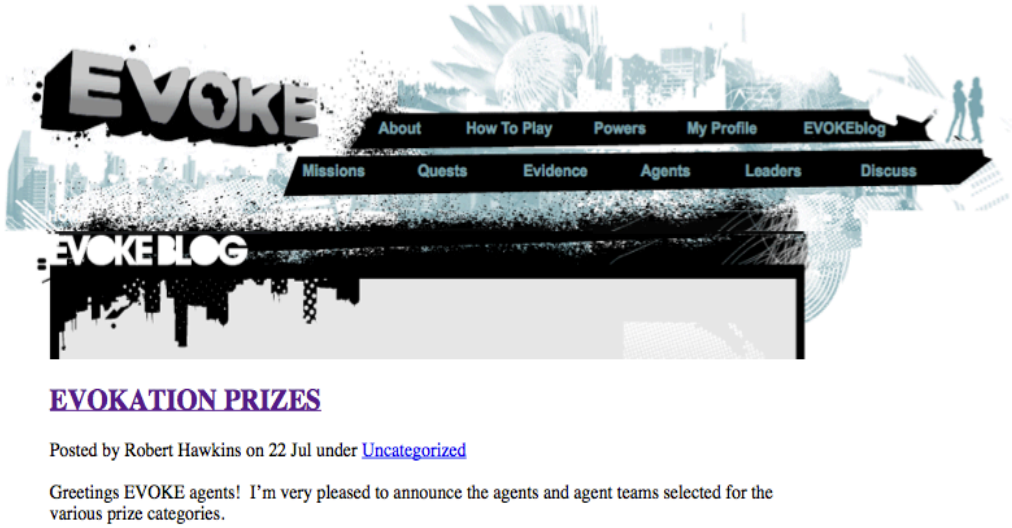


Figure 24: Screen dump made16 July 2016 of blog.urgentevoke.net /2010/07/22/evocation-prizes/

For a player like *Diana*, the framework the game became a competition, and the potential collaboration between players was minimised. Besides not being very interested in the social side of *Urgent Evoke, Diana* also mentioned other reasons for not interacting very much with the community of players. One is her Internet connection:

> *I have to say, up front, that I was on a very slow and limited connection and didn't have a lot of access to the game, so my interaction with others was very limited.* (Diana)

Living in Liberia means that *Diana* had an unstable Internet connection. This created a technological challenge that affected her participation in the player community: interaction with others becomes difficult when a player never knows when she can be online and for how long. This is a challenge that other players also mentioned in the data collected by the Natoma group for the World Bank (Gaible and Dabla 2010).

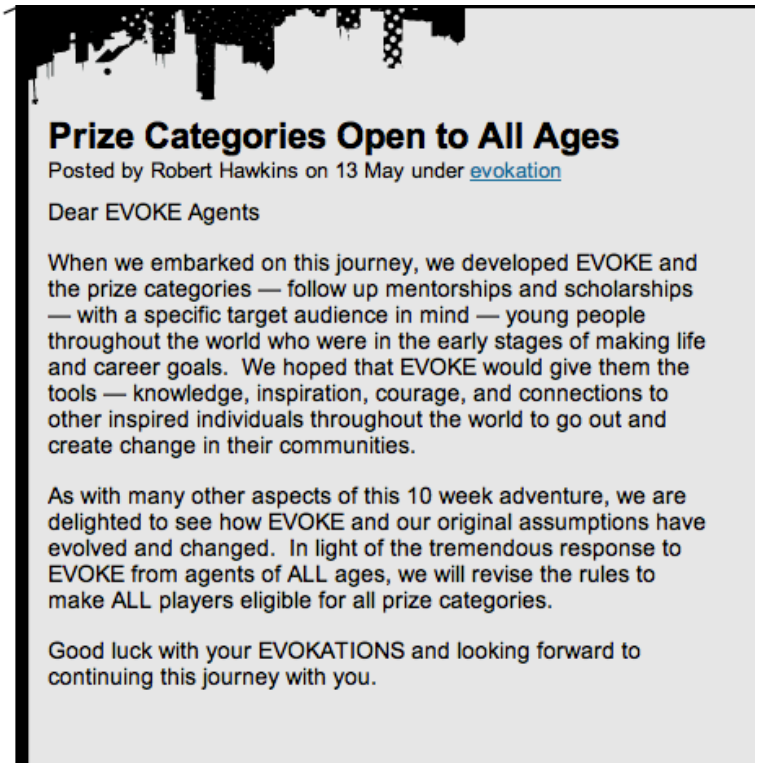
In addition to her technical problems, *Diana* said that she did not feel that the social environment of *Urgent Evoke* had much to offer that she could not get off-line. She said that her physical surroundings in Liberia always offer her '*stimulating activities and challenges'* (Diana), and her need to engage in the player community was therefore not very significant. It could be argued that *Diana's* residence in Liberia caused her to face many of the challenges that are built into the *Urgent Evoke* 'imagination infused reality', which resembles what she experiences in her daily life off-line. But most interestingly, *Diana* mentioned a fourth reason for not engaging in the player community to a larger extent, namely that the community of *Urgent Evoke* gave her a role that she did not want:

> *And there is one other thing: I'm an older woman, and I find that my ideas are often discounted, and that in a group setting the most valuable role I am*

> *expected to play is one of a listener. I was, really, just too selfish to do that with* UE. (Diana)

Clearly, *Diana* has experienced that her age affects the role that a given community is willing to give her. From her point of view, in the division of labour among the *UE* players, she might have been expected to do the listening instead of raising her voice and sharing her knowledge, opinions and ideas. It is a disempowering experience when the expectations of any community limit the way anyone feels she can interact with a community. Being cast as a 'listener' would have meant that *Diana* would not be able to participate in the community in a role that would be meaningful to her and that supported her goal of finishing the game by turning in an Evokation.

A consequence of this division of labor among the players could have been that *Diana* had accepted the role she was given and had become the 'listener' that she felt others would like her to be and she would never have developed an Evokation. But *Diana* did not accept the role that she felt the community saw fit for her; instead, the experience strengthened her idea that the community had nothing to offer her. The discrimination that *Diana* experienced was supported by the game design: a *UE* rule stated that only players under the age of 35 would be eligible to be awarded in the game (in other words, people above 35 could not win). Some players were very offended by this and succeeded in getting the game designers to change this rule so every player, regardless of age, had access to the prizes offered (see screen dump in Figure 24 below).



Prize Categories Open to All Ages

Posted by Robert Hawkins on 13 May under evokation

Dear EVOKE Agents

When we embarked on this journey, we developed EVOKE and the prize categories — follow up mentorships and scholarships — with a specific target audience in mind — young people throughout the world who were in the early stages of making life and career goals. We hoped that EVOKE would give them the tools — knowledge, inspiration, courage, and connections to other inspired individuals throughout the world to go out and create change in their communities.

As with many other aspects of this 10 week adventure, we are delighted to see how EVOKE and our original assumptions have evolved and changed. In light of the tremendous response to EVOKE from agents of ALL ages, we will revise the rules to make ALL players eligible for all prize categories.

Good luck with your EVOKATIONS and looking forward to continuing this journey with you.

Figure 25: Screen dump made 16 July 2016 of blog.urgentevoke.net/2010/05/13/prize-categories-open-to-all-ages/

What *Diana's* story underlines is that social networks do not always create openings for the exchange of resources and the empowerment of the participants. In *Diana's* case, the social network in *Urgent Evoke* worked in an excluding way by making her feel that there was only a limited role for her to play in the shared activity.

John cited lack of time and *Diana* her inclination to play single-player games, her age, her unstable internet connection and living in a very challenging environment as reasons for not fully engaging in the player community. *Peter* and *Tom* added to the list of reasons by noting their off-line personalities:

> *I never really spent a lot of time [in the game] looking at other people's stuff […] I guess I was a selfish evoker […] I think it is just my more introvert kind of nature just trying, you know, staying to myself and my own thoughts. (*Peter*)*

> *I very much like personal face-to-face connection, and so during the game there was networking going on and like you communicate through the game and build sort of a community there, but I didn't really, you know, I gained much more from here is a particular person who I like really sort of respect and have an interesting connection to and not this overall like here is this worldwide group of people that I know just through the Internet.* (Tom)

An introverted nature and a preference for face-to-face contact prevented *Peter* and *Tom* from truly engaging in the social network opportunities of *Urgent Evoke*. Using a social technology that encourages the formation of online social networks and collaboration did not make the two men radically change the way they would normally interact with other people.

As the above statements demonstrate, not every player *experienced* the social network of *Urgent Evoke* as supporting their game play or the development of their Evokation. That there are players who are not interested in the social opportunities of the game is not surprising. Both Bartle (1996) and later Yee (2006) demonstrate that players have different motivations for playing, and not all players are interested in social interaction while playing.

What is surprising is when one compares the players' experience of their game-play as independent and themselves as very lightly connected to the player community with the social network analysis presented earlier in this section. If we look at Figure 20 presented above, it shows that *John, Tom, Peter* as well as *Diana* were centrally positioned within the sub-network called the winner network. This does not mean that their experiences should not be trusted; it is how they experienced it. But because of the mix of data used in this analysis, it is possible to see that even though the four players did not have many connections and did not feel they were really embedded in the player community, the connections they did have ensured that they were included in the well-knit sub-network together with the rest of winners, which provided them access to the resources needed to succeed in the game.

Partial conclusion

As stated in the introduction to Chapter 5, this second part of the analysis is meant to answer: *How did the division of labour in* Urgent Evoke *create openings for the winners to go all the way in the game and produce an Evokation?*

I began this part of the analysis with a quote from Dahlander and Frederiksen (2011): that individuals often lack the sufficient expertise to innovate alone when the knowledge frontier is complex and expanding, and that studies show that innovations are therefore most often the result of collaboration in communities.

The players of *Urgent Evoke* dealt with wicked problems where 'the knowledge frontier is complex and expanding', and the game was designed to empower the players to deal with this complexity by generating openings for their formation of a network and their collaboration and the division of labour within it. As Chapter 2 showed, the design provided possibilities for the players to chat, give feedback and reward points to each other, and there were game runners hired to facilitate the communication among players. The narrative of the game stressed the idea that innovations are the result of a team effort, and that a good team integrates people with different personalities, experiences and resources. The game design also allowed visitors to follow the game and players to play at a different pace, as they did not need to level up during the game in order to follow the game play to the end. The design of the game indicated that the developers were interested in creating a diverse community of players that could accommodate different forms of player motivations and allow for individual degrees of intensity of game play among the players. This openness and flexibility in the design, together with the clear goal of the game, enabled the players to create very individual game play while still working on a shared goal. Both the Social Network Analysis and the analysis of the interviews show that the design of *Urgent Evoke* promoted the formation of a diversified network and a division of labour among the players that played an important part in the winners' choice of and capacity to produce an Evokation.

The social network analysis demonstrates that all the winners are included in the smaller, light blue sub-network embedded in the larger overall network. That all the winners are part of this network makes it reasonable to conclude that resources were available in the light blue network that were not available in the rest of the network. The analysis also shows that all the winners were connected to each other (with the exception of *Nick*) and that they were over-represented on the top 100 lists of players with a high Degree, Eigenvector and Betweenness centrality – all calculations made to identify different types of important nodes. This over-representation was visible in the calculations made on the overall network as well as on the light blue sub-network containing the winners, which indicates that the winners a disproportionally good access to the resources available in the network. That the winners are connected to each other and at the same time take different positions in the network can be seen as a form of division of labour among the winners, as the different positions are associated with different types of advantages. By occupying different positions and being connected to each other, the winners were able to 'work' the network in different ways and bundle the advantages that they gained from their division of labour.

A picture emerges from the interview analysis of how the actions of the players in the *UE* network – or individuals connected to the game's network – created openings for the winners to go all the way. The analysis makes clear how the *UE* players performed different roles in the game, and that the work produced in these roles influenced the winners in a positive way. The openings that the winners identified as central for their development of an Evokation were actions such as people introducing them to the game, providing a helping hand, cheering them on or just looking at their work. These are all small 'jobs' that take a limited amount of time but had a great effect on the winners. I think of these small actions as micro-donations made to the winners in order to help them in their development process.

But some of the 'donations' that the winners talked about that influenced their development process positively were not deliberate acts made by fellow players in order to provide support. Examples of this type of donation include the effect of meeting like-minded people or becomg inspired by looking at the work of other players. In these cases, it is the mere participation of other players in the game in general that provides the winners with a simulating environment that generates openings for their development as social innovators.

Together, the social network and interview analyses demonstrate that the players who chose to go all the way in the game, turn in an Evokation and win were not 'lone wolves'– even though some of them thought so. They were socially connected actors embedded in a larger network of players and visitors. The analyses show that the design of *Urgent Evoke* enabled the emergence of a large community where different forms of participation existed. This provided the players with access to different types of resources, often in the form of micro-donations, and the diversified environment created openings for the winners to go all the way in the game and create an Evokation.

Analysis: Section Three
Finding and creating openings post-game

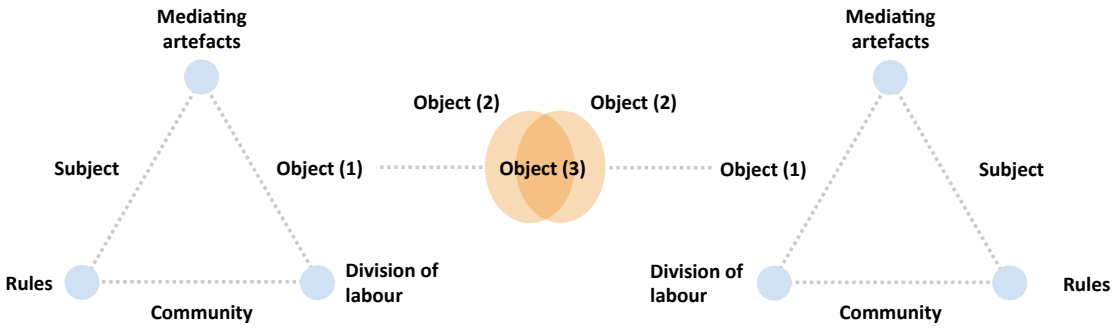


Figure 26: Reproduction of Engeström's model of the third generation of activity theory. Engeström 2001:136

In the previous two sections, the focus has been first, on the players' *pre-game* motivations for playing *Urgent Evoke* and second, on how the *in-game* player *UE* community helped empower the winners to send in an Evokation and thereby think of themselves as possible post-game social innovators. In this third and last section, the focus is on what happened *post-game*, i.e., after the players left *Urgent Evoke* and the winners were supposed to implement the ideas sketched in their Evokations in the physical world.

Theoretically, it is Engeström's third generation model (see above) of an activity system (3GAT) that forms the base in the following analysis.
In Engeström's third generation model we find the development of the initial models created by Vygosky and Leontjev, as Engeström's model includes not one, but several activity systems. This indicates that he is not only interested in how the dialectical relationship between the components in the individual activity systems influences human development and learning, he poses questions of what happens in the meeting between several activity systems. By using Engeström's development of AT, it becomes possible to see human learning and development in a larger societal perspective because the connectedness between different activity systems is in focus. Further more, it also becomes possible to discuss how the connections between systems affect the development of both the individual activity systems and subjects involved.

Engeström's 3GAT is a learning theory, but it could also be seen as an innovation theory because the focus is on the meeting of (at least) two activity systems where a new third and shared object is created through negotiations between the activity systems. This negotiations process of a new third object could be seen as a process of innovation – or at least as a process that holds the potential for innovation.
The new third object is placed outside and in between what could be called 'the original activity systems' and is shaped by the previous learnings and goals of the involved activity systems. The third object stands in a dialectical relationship with the 'original' activity systems because it reflects back on the activity systems involved and influences them. With Engeström, we can no longer think of activity

systems as closed and isolated entities, but must see them as embedded in larger structures where new objects are created and mutual influence takes place.

Engeström's third generation model of AT is interesting in relation to this final part of my analysis because it enables a discussion of how, if at all, the activity system of *Urgent Evoke* empowered players to become post-game social innovators. *UE's* goal was to empower the winners in a way that enabled them to implement their ideas in the physical world after the game ended. From a 3GAT perspective, this means that the winners should be able to identify another activity system and be willing to negotiate a new third and shared object based on the players' Evokation. It becomes possible with the model to move the analytical focus from the in-game situation to the post-game situation, where the winners' possible transfer of resources from the game to the physical world and their capacity to meet and negotiate new and shared objects with other activity systems outside the game are important.

But when I used 3GAT in my analysis of the data, I realised that the game design and the players post-game activities challenge Engeström's model in different ways. What these challenges are, how the players dealt with them and where some of them found openings are the subject of this last section of the analysis.

Exodus of a player community
When the *Urgent Evoke* game ended, the winners of the game were supposed to start implementing their Evokations. But because the game had ended, this meant that the players, including the winners, were left without a technology that could host their community and facilitate their post-game activities. There were no longer any shared missions, quests or goal or any technology to hold the community together. In particular, the winners, who were supposed to step up as post-game social innovators, were left in a vulnerable situation without the structure of the game, the resources it offered and support of the player community. An activity theory-inspired drawing of the situation could look like this:

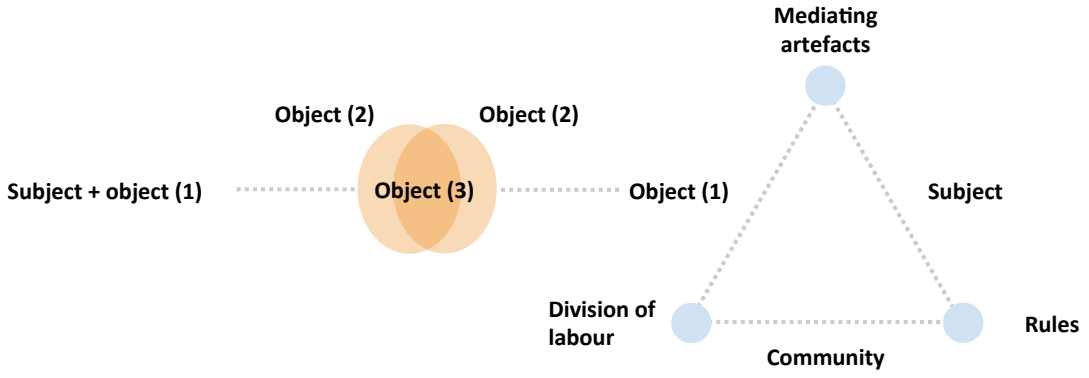


Figure 27: Visualisation of an activity theoretical understanding of the post-game situation of the winners of Urgent Evoke*.*

The drawing does not resemble the original model drawn by Engeström because it does not depict a meeting between two activity systems. Instead, it shows a subject

(one of the winners) with an object (the Evokation) facing the negotiation of a new third object with a second activity system on her own.

Once the game ended, Herman, who was one of the winners, created a site on Facebook called 'EVOKE Founders, Class 2010'. [24] This was an attempt to find a new technology that could function as a refuge for the player community and facilitate the work begun in *UE*[25]. Today (March, 2016), the site has 91 members, most of whom are former *Evoke* players, but also some, including me, who found the network later. There is still activity on the site: members post items that they believe will be of interest to the community, and occasional discussions of socio-political issues do occur. But the activity level is low and does not in any way resemble the level of communication that took place in *Urgent Evoke*. As the sheer number of members on the Facebook site shows, only a fraction of the original player community migrated to this site, and none of the winners interviewed mentioned the site as a technology that helped them in their efforts to implement their ideas post-game.

I am not sure how to interpret the fact that only a small number of players joined the Facebook group, but one thing I do know is that changing technologies and migrating to Facebook did not provide the winners with the same access to a large social network as the game had. Therefore, the winners lost a lot of the social capital and different forms of resources that the player community had offered them: they were more or less on their own.

This situation formed the backdrop for the last part of the players' process towards becoming post-game social innovators, and as the following analysis demonstrates, not all of them succeeded in implementing their Evokations in the physical world. My analysis of the interviews shows that 10 of the 32 winners succeeded in varying degrees in turning their ideas into reality.

To be consistent with the aim of this project – to find the openings for empowerment – the following analysis focuses primarily on the winners who succeeded as post-game social innovators and analyses the ways their experiences in *Urgent Evoke* helped them implement their Evokations. But first, I spend a looking at the reasons for failure given by the players who did not succeed.

Lacking resources and getting caught in everyday life
Of the 18 winners interviewed, eight stated that they did not succeed in implementing their Evokations after the leaving the game. These eight winners suggested different reasons for not succeeding. I have divided these reasons into four categories – *lack of funds, lack of social support, lack of skills* and *getting caught up in everyday life*. In the following section, I show how these reasons are present in the players' stories about their post-game experiences.

Tom and *Jasper* did not succeed in implementing their Evokations. The reason they both gave is that they were very young at the time of the game and that their daily

[24] https://www.facebook.com/groups/evokefounders/ (visited 28 March, 2016).
[25]http://www.urgentevoke.com/profiles/blog/show?id=4871302%3ABlogPost%3A150435&commentId=4871302%3AComment%3A150905 (visited 28 March, 2016).

lives were therefore focused on school and on passing exams. *Jasper* was 15-years old at the time of the game and *Tom* was about to start college. Implementing their Evokations was a more demanding task than playing *Urgent Evoke,* they said, and both decided not to go through with it. *Jasper* tried for at time to pool his resources with *Jonas* and a couple of other players, but they did not succeed as a group. (I will return to this attempt later on in the analysis of *Jonas's* post-game activities.) *Jasper* ended up leaving his Evokation behind because, as he said, *'I kind of got caught up in other aspects of life. It was fun while it was there'*. (Jasper). For *Tom*, combining working on implementing his Evokation with going to collage was not an option:

> *I was not trying to continue with my Evocation, I was not really taking much from the game forward because I already knew that I was going to college the next four years, so I would be learning and working on this sort of thing, so in my opinion all the mentorship that I needed was through my school.* (Tom)

John and *Peter* found themselves becoming entangled in other obligations. *John* said:

> *I do think about it [the Evokation,] but currently I am not working on it due to other engagements. The main reason that I discontinued working on it is due to lack of funds.* (John)

It is a bit more complicated for *Peter*:

> *Part of winning Evoke was to get a chance to participate in some crowd funding activities through Global Giving – it was my first time trying that, and I didn't really put a lot of effort into it. I am busy working, working full-time and have a family, just doing* Evoke *was a time commitment, but it was one that was interesting and one I actually looked forward to after getting home from work, getting the kids to bed, you know sitting down at the computer and actually seeing what the next mission was. That was fun and everything, the crowd funding and trying to raise money is not fun, asking people for money is not fun. So that didn't go so well.* (Peter)

The challenge for the two men was the same – finding time and money. But *Peter* also added a new element: that implementing his Evokation would demand skills that he himself does not have. He needed to find people with the right skills willing to help him or would have to raise the money to pay people to do so. He did not succeed in either, and was not willing to spend the same amount of time implementing his Evokation as he was playing *Urgent Evoke* because working on the Evokation in the physical world is not as much fun as playing with the idea in the game.

The lack of social support that *Peter* cited is a reason that several of the winners gave to explain why they did not succeed as post-game social innovators. *Gabriel* said:

> *My Evocation was fine at the time [when the game ended]. It was complete, but then it stopped. It required that a lot of people give me time and they*

> *couldn't do it after the first year. So it is still there, but it is not active.* (Gabriel)

Like *Peter, Gabriel* was not able to implement his Evokation on his own. But in *Gabriel's* mind his Evokation is not dead, even though he has not been able to engage in it since the game ended.

The lack of social support theme occured in the interview with *Diana* in several forms. First, she talked about not having a social network that she could draw on while looking for funding for her Evokation post-game:

> *I failed […] I hated the Global Giving component, It was like begging. I'm a bit of a loner and have a small circle of friends, so there wasn't a large pool of church members, alumni buddies, etc., to call on. I would rather have funded it myself.* (Diana)

Second, *Diana* talked about not getting the support she needed from the mentor she was assigned to:

> *I did have a mentor. She had a very active project herself and wrote about her experience with it. However she didn't seem to have either the time or experience to apply her experience to my project. I think it wasn't in her field and didn't hold much interest for her. After a while she stopped answering my emails.* (Diana)

The lack of a personal social network and not having a mentor engaged in her project were important factors for why *Diana* did not succeed in implementing her Evokation. Unfortunately, she is no exception when it comes to disappointing experiences with mentors. Most of the winners who were assigned a mentor were unable to make contact; if contact was made, it was very short-lived.

This is the main reason why *David's* Evokation was stranded:

> *I could actually initially do something, but I couldn't get the funding or the sponsorship […] I could only get the mentorship […] Actually they told me this is going to be your mentor and this is her contact number and her contact details and if you can contact her directly, and I said okay that is fine. […] But unfortunately I couldn't get responde I kept writing to her, two or three times.* (David)

The most surprising person among the winners who were not able to implement their Evokation is *Eric*, who was known by several players as 'Mister *Urgent Evoke*'. He was a very active player, completed all his missions and quests, received five out of six badges, had a large in-game network and could be found on nearly every leader board. He talked about what happened with his Evokation post-game:

> *I almost got destroyed […] the major mistake is the idea that one can be a successful social entrepreneur or innovator as a side business as if one is just playing a game. […] there was no one to tell me what you have bitten off is*

> *more than you can chew, not because you are a newbie but because this is not a GAME. As a game I could win it, as a course I could top it, even the last fundraising round I made it among the top five but beyond that I needed big time help desperately.* (Eric)

Eric further described how he felt as though he was swimming in deep water as he tried to combine a job, a family, including an autistic son, and the writing involved in implementing his Evokation. He sees himself as the best Evoke player 'with the clearest understanding of all the sides' (Eric), but he felt left behind by the World Bank because he was not capable of making his idea work in the physical world.

What *Eric* underlined more than the other winners interviewed is the fact that making it in the game is very different from pulling it of off-line. He sees himself as a good player and a good student, but when the game was over and the structure of the game disappeared, he felt lost.

This handful of insights about what hindered some of the players in implementing their Evokations post-game indicates to me that even though Castronova (2005) has told us that the magic circle is perforated and our online and off-line lives blend, there is still a difference between succeeding in a game and in physical life. *Urgent Evoke* might indeed be an extremely well-designed, fantasy-infused game where the realities of the physical world can seem very tangible and present. But the reality of the game is still different from the off-line world. The magic circle of *Urgent Evoke* opened up a utopian horizon (Jungk and Müllert 1987) to the players, and as we have seen in the previous sections of the analysis, the winners' experiences during the game empowered them. They began to see a (new) potential in themselves and they made the effort to develop an Evokation because they believed that they would be capable of implementing it. But in spite of what they had learned during the game and the resources they were awarded, some of them found the demands of the physical world more complex than the demands of the game, and they lacked many of the resources the game had provided. And as we have just seen, several of them came to the conclusion that being an in-game social innovator was not the same as being a post-game social innovator. If they have not given up completely on their Evokation, it is at least resting for the time being.

Besides the very concrete hindrances for success that can be found in the stories of *Tom, Jasper, Peter, John, Gabriel, Diana, David* and *Eric*, I think it is worth looking at their stories in light of the altered version of Engestrøm's 3GAT model depicted above. In the model, the winners are no longer embedded in the system of *Urgent Evoke* because the game had ended and they were to a large extent left on their own. In Engestrøm's original model, *Tom* and the seven other players mentioned would still be part of the *Urgent Evoke* activity system; from that position they would create a connection to another activity system. But now they were on their own. Looking at the stories from this perspective makes me think that the failure of *Tom* and the others should not be interpreted as an incapacity of the players to deal with mundane questions about time and money. Instead, the enormous loss of power and resources once the game ended left the players vulnerable at the exact moment that they were intended to perform as off-line social innovators.

Another way to understand why these winners failed is to think of their transition between the online and off-line situations as a moment of dis-empowerment. As the activity system of *Urgent Evoke* ceased to exist, the players lost the resources that the game had provided in the form of clear goals, structure, knowledge resources and a social network. The negotiation that theoretically was to take place between two activity systems, according to Engestrøm, now had to take place between an individual and a system – a situation that seems so unequal that it is understandable that *Tom, Jasper, Gabriel, John, Peter, Diana, David* and *Eric* felt that they did not have the necessary power to continue with their post-game Evokation.

I now look for the openings in the stories of other winners interviewed. In this analysis, I keep returning to Engestrøm's model to illustrate how the players managed to deal with new activity systems from a position of forced autonomy.

Different pads to becoming a post-game social innovator
The following analysis builds on the interviews made *with Laura, William, Susanna, Axel, Michael, Allan* and *Jonas*. These players all stated that their Evokations are still alive and moving forward. *Alice, Anni* and *Oscar* have done the same, but the information on their post-game process produced during the interviews is too feeble to include them in the actual analysis.

In this interview analysis, I found six different strategies for handling the post-game challenges. Because most of the players use overlapping strategies, there are similarities in their stories. But in my analysis I try to emphasise the differences without erasing the resemblances in order to underline the nuances and the complexity of the post-game situation.

Introducing the object in another activity system
After finishing *Urgent Evoke* and her studies, *Laura* became a university teacher. In her job as a teacher, she saw an opening for using her experiences from *Urgent Evoke* for educational purposes.

First, she engaged in a collaboration with *Eric*, her fellow winner. *Eric's* Evokation is concerned with creating better conditions for children with autism in India. Together with her students, *Laura* produced a design for a village for the children in *Eric's* project. She even traveled to India with the students to present the project to *Eric* and the people he works with. As we know, *Eric* did not succeed in implementing his project, but *Laura* discovered how her new job offered her a structure for developing ideas from *Urgent Evoke* further. She started working on her own Evokation (concerned with how to create housing for homeless people) by turning it into a student project. As her idea of involving the students developed, she created an organisation, where she offers workshops and other learning opportunities for young professional and architectural students interested in engaging in community outreach projects. Today, the organisation not only focuses on projects for homeless people, but teaches the students how to become social innovators.

Laura's post-game process does not fit Engeström's model: instead of negotiating a new shared object, she introduced first *Eric's* object and later her own in a new

activity system where she herself is part of the community. Her job gives her access to the recourses available in the activity system, and she can use the established structures of the system to push *Eric's* and her own ideas forward. Later, she expanded her object to include all sorts of socio-political issues as well as the goal of turning the students into social innovators. In order to be able to expand her object, she created a new organisation that functions as a separate activity system.

A visualisation of *Laura's* in- and post-game process could look like this:

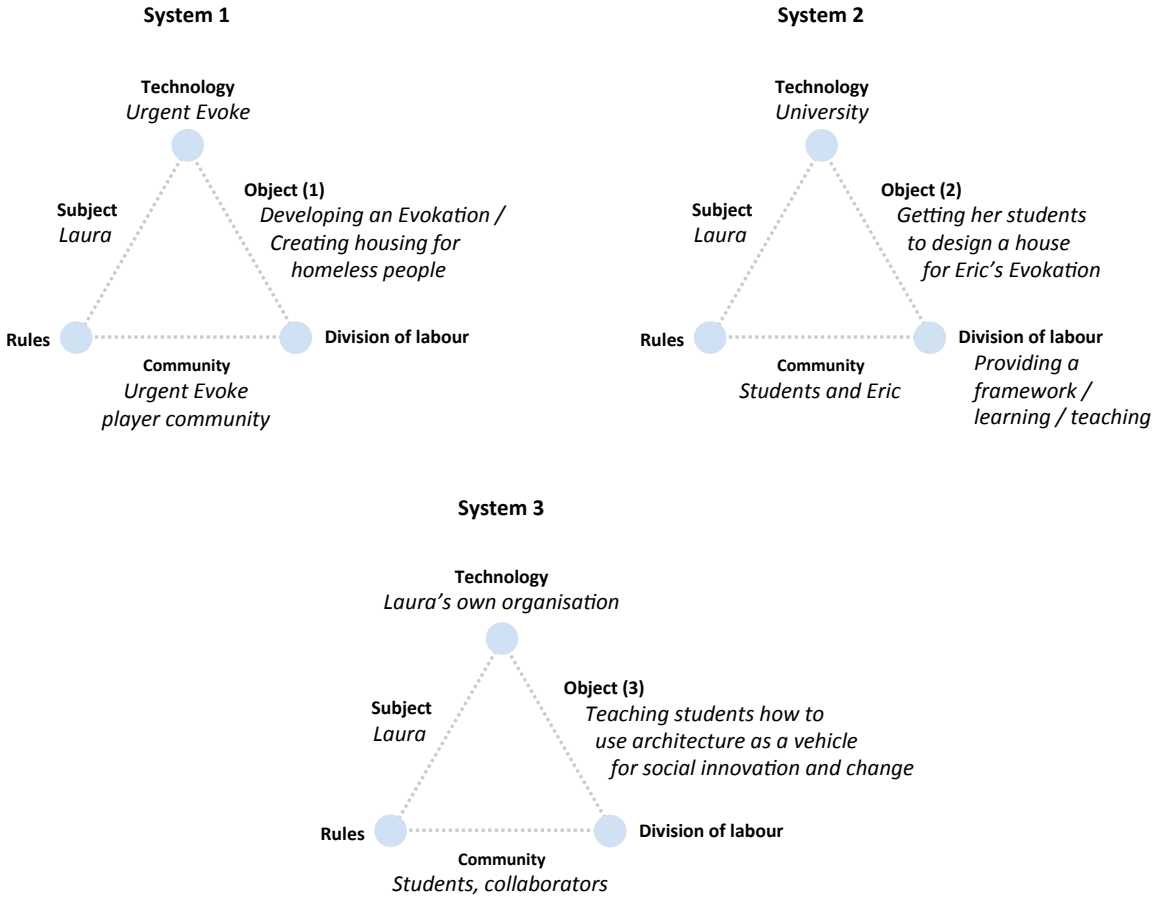


Figure 28: Visualisation of Laura's in and post game

Urgent Evoke provided *Laura* with an object that she could take with her and a capacity to recognise in her classes at the university a parallel to the *UE* community. This structure that provides her with resources that enable her to develop the Evokations further. I also see an inspiration from *Urgent Evoke* in *Laura's* expansion of her object and in the activity systems that she builds. The object of *Urgent Evoke* became her object, and in that sense the biggest opening *Urgent Evoke* provided her with is perhaps the inspiration that the game design offered, which became the groundwork for her own organisation.

Transferring an in-game artefact

Axel is the introvert white man from Zimbabwe who has always had the idea that he should change the world for the better, but felt that it was inappropriate to claim that he was able to. During *Urgent Evoke* met like-minded people with similar

socio-political interests, slowly began to feel that it was perfectly all right for him to share his inclination to become a social innovator and decided to turn in an Evokation. *Axel* is a programmer; his idea is to build an IT platform that will help people build their own business by creating an eco-system online where people can learn and collaborate.

After the game, *Axel* visited an ICT conference run by one of ministries in Zimbabwe, where he told other participants that he is an accredited World Bank social innovator. Mentioning the World Bank accreditation granted him access to the minister and a chance to present his Evokation. Today, *Axel* works for the government implementing his Evokation in a renegotiated form, where the aim is to create a social digital platform where prisoners can get the support needed in order for them to develop business ideas and thereby create for themselves a way out of a life of crime.
In *Axel's* mind, there is no doubt that he would not be doing what he is doing today if it were not for *Urgent Evoke*:

> *[…] personally I found it [the game] builds up your confidence that you do have a voice and you can actually make a change. I don't think I would have had the confidence to approach the prisons and do the work projects that I am doing now if I hadn't been through* Evoke*.* (Axel)

Visualizing Axel's in and post-game:

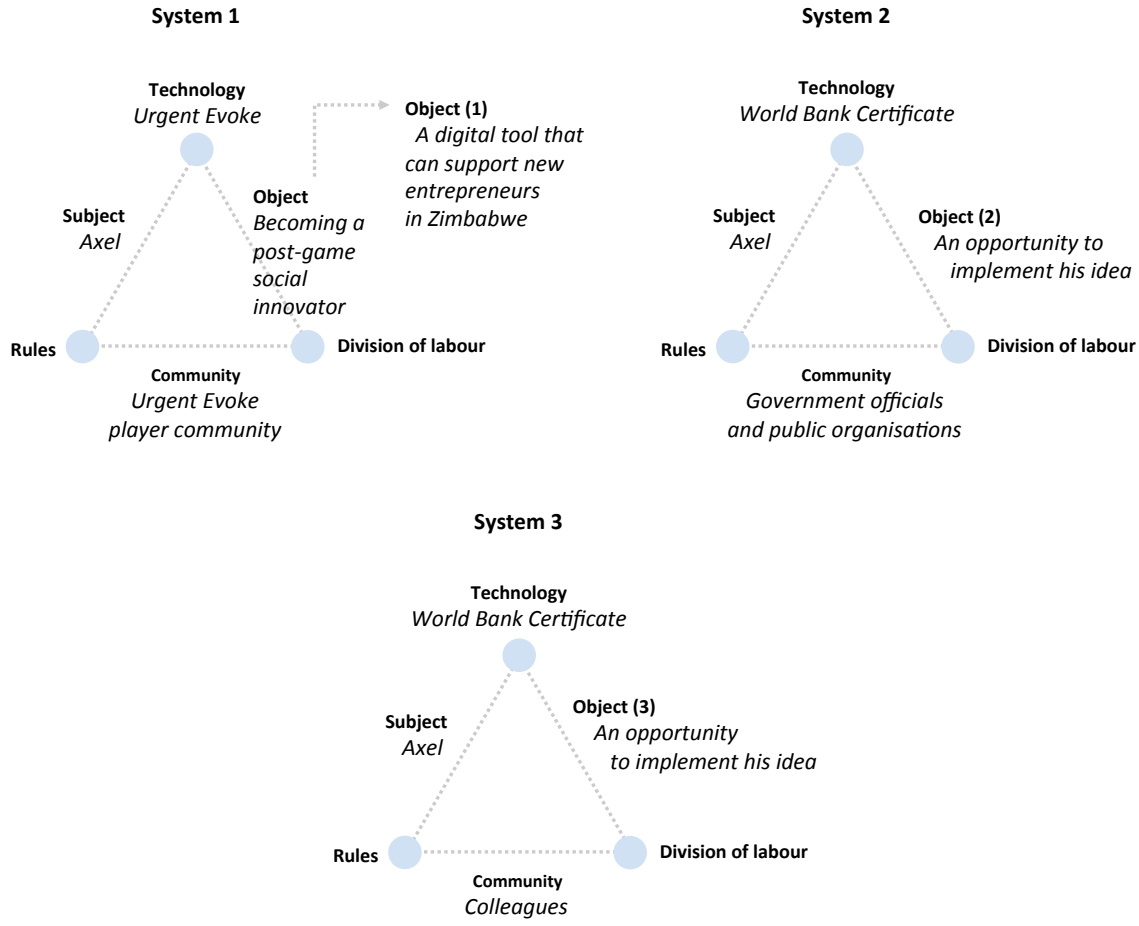


Figure 29: Visualisation of Axel's in- and post-game

Like *Laura*, *Axel* identified another activity system (the prisons) that might have an interest in his idea and managed to become a member of the prison activity system, bringing with him his object, which he modified to fit the prison activity system. *Urgent Evoke* empowered him to become the social innovator he has always wanted to be by providing him with a safe space where he could practice his voice and develop the confidence that he had something relevant to say and that he was capable of creating social change. He also received a World Bank certificate that certified him as a social innovator. This certificate can be seen as a technology that gave Axel's digital game play a recognisable value outside the game: it worked as a key to the door of his new activity system.

Passing on the object

I make a parallel analysis of *William's* and *Susanna's* post-game experiences because there are many similarities between them. Both chose to pass on their Evokations to other activity systems and are today only remotely connected to implementing the ideas. While they are no longer directly working on their Evokations, they have been able to identify or create new activity systems interested in and able to take over their Evokations and implement them in the physical world.

Susanna was in transition during the game: she and her family were about to leave the Philippines to move to Tanzania. During her six years in the Philippines, she and a few friends had been playing with the idea of creating a combined school and community garden where primary school students could grow their own food. When *Susanna* was told that she was an *Urgent Evoke* winner, she had one week left in the Philippines and chose to pass on her Evokation to her friends and a local network in the Philippines.

> *Bukidnon, where the farm is, is like in the northern part [of an island in the southern part of the Philippines] […] and they have these kinds of ideas and really kind of progressive thinkers and just a really, really tight community and lots of young kids […] we had many evenings been talking about ideas and how we can start a kind of really good pre-school leading into elementary school there.* (Susanna)

During the six years she lived in the Philippines, *Susanna* had built a network of like-minded people who were also teaching and working with development issues. The ideas that *Susanna's* Evokation built on had been brewing in this network for some time. *Susanna* did not have to identify a new activity system to negotiate a new shared object with, as she was already part of an existing activity system off-line that was interested in the idea. I do not think *Urgent Evoke* empowered *Susanna* to do something that she could not have done without the game. But the game did allow her to focus and take the necessary steps to turn a good idea into a great project. Winning the game was also the final push she (and her off-line network) needed to realise that it was time to put their idea into action. Today, Susanna is not officially part of the project, but she still returns to the Philippines to visit her friends and the project.

William's first challenge was to raise money through the Global Giving competition:

> *You should have a good network to be able to get funding, to get people to donate to your cause, especially in the initiate stage, […] I didn't have [this] at the time, so I tried to use Twitter and Facebook […] asking people to donate to the cause […] I think overall I got about […] seven hundred something dollars. But then I still had to get the extra one thousand from The World Bank […] so I was good. Many people, well not many people but some people managed to get to the next round […] That's something I didn't manage to do because of my network at the time ….]* (William)

William also struggled to raise money for his project just as some of the winners who did not succeed did. But he succeeded, not because he had a large social network that he could draw on, but because he used alternative technologies like Facebook and Twitter that allowed him to reach people outside his personal network.

> *I looked at it as, you know, in a way it was about fundraising and also trying to sell your idea to people and see how people would respond to that. I had many random donors, which was really interesting to see people just donating to a cause and I didn't even know them. I had some friends donating, and it was also really interesting to see that friends could really believe in my cause. It is also like a very rare thing to get people here to donate to an online cause […] and also a lesson that I learned from that is I have been able to do many drives, like fundraising drives locally, but all my experience has been drawn from what I learned from the game.* (William)

For William, *Urgent Evoke* was more a learning experience than an entertainment technology, and the learning that began in the game continued outside the game. There is no magic circle that separated the game from the physical world. Instead, there is a common thread running from William's experiences in the game to what he learned afterwards because the experiences in the game continued to form the basis for more learning. He seemed surprised about what he was able to achieve, and his positive experience winning the game seemed to be reinforced by his getting both strangers and friends to donate online to his project. He might not be able to raise the same amount of money as other of the winners did, but this does not seem to be that important: the Global Giving contest is a way to learn some new skills that he can use later to push his Evokation even further.

After the Global Giving contest, *William* knew that he did not have enough money to start the demo-farm described in his Evokation. Instead, he approached a women's farming group in his local environment. He wanted to see what they would do if they had a thousand dollars:

> *Yeah, I knew them. And when I got the money, of course, I went to them and said, 'If I have thousand dollars, do you think it would be of value to your group? And if it has any value, what is the value?*' (William).

Together, they came up with an idea of micro-loans for local women farmers. The women were not as well-organised as *William* would like them to be, but they developed a structure to assess whether a loan applicant is eligible or not.

> *They had a group, which was, I would say not very active in terms of coming together, planning together, cooperating and what I wanted to achieve with my project was to see a women's group that really works together [….] From my childhood I learned that money is something that brings people together, but it can also separate them. So […] being able to give people these small loans would bring them together, because every time someone wanted the money, they would come to the group and say, 'Look, I want to grow beans', and they would say, 'How much beans do you want to grow'?, and they would say, 'Probably if you give me enough to buy ten kilos, I would be happy', and they would say, 'Do you have the land?', and they say, 'Yes', and then they would say, 'Okay, first we come and inspect your land then we would...'. So eventually, it would turn out that they get more info and then in a way they keep following up from time to time and for me that was something that I really wanted to see and it is exactly how they are taking it on.* (William)

William approached a social network of women farmers he knows. He was willing to let go of his original idea of a demo-farm and instead negotiate with the woman about how his seed money and the money from the Global Giving contest could best be put to use. At this moment, the women were not really functioning as an activity system; they were not really working together on a shared object. Through the negotiations, *William* and the woman managed to create a new shared third object – providing micro-loans to female farmers. And during the negotiations, the women's network began to resemble an activity system with an object, rules and a division of labour.

To complete the analysis of *Susanna's* and *William's* interviews, I would like to draw some models showing how *Susanna* and *William* managed to pass on their Evokations to a new activity system. In *Susanna's* case, no meeting between two activity systems (as demonstrated in Engestøm's 3GAT model) took place. Instead, there was a subject and an object that entered different activity systems and in the process changed and developed. In the end, *Susanna* returned the object she developed further during the game to the activity system where the object was born. The contribution of *UE* in this process was to offer *Susanna* a structure in which she could develop the collectively created idea further. This process convinced *Susanna* – and perhaps also her pre-game activity system – of the strength of the idea and that it ought to be implemented.

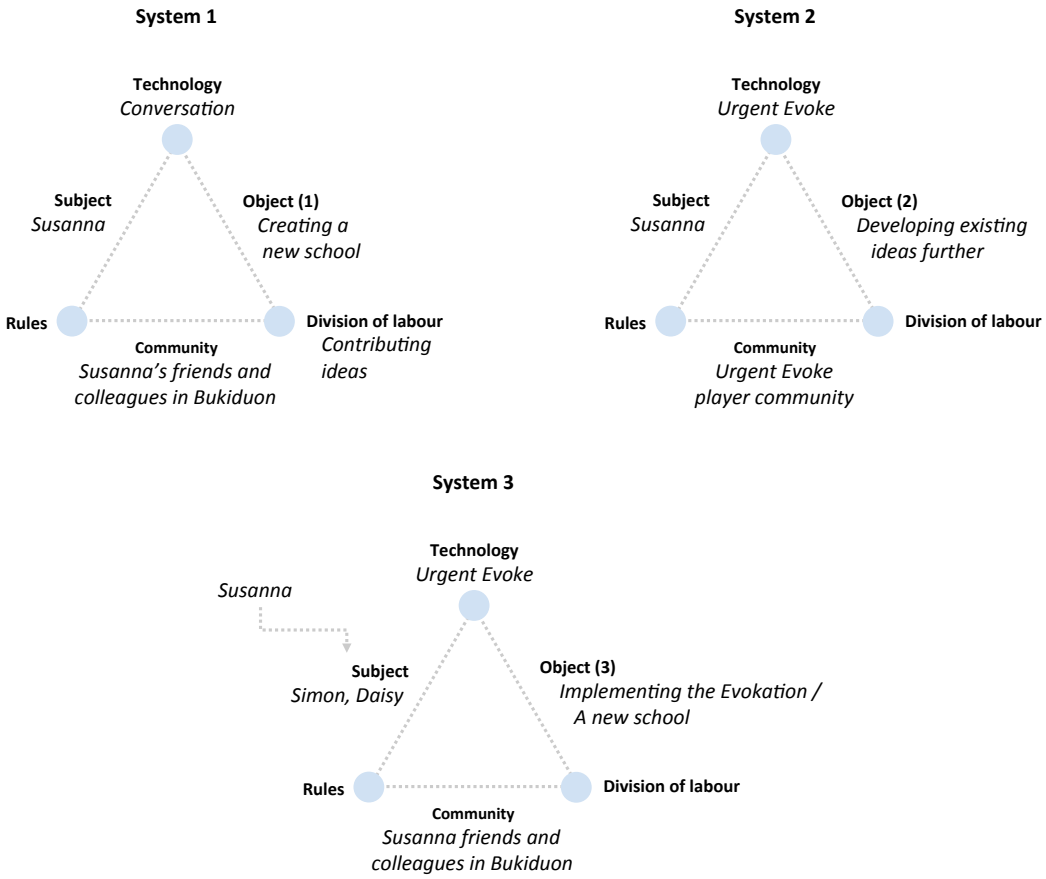


Figure 30: Visualisation of Susanna's pre-, in- and post-game

The following sketch shows *William's* in-game and post-game situations. Again, no negotiation took place between the two activity systems post-game as in the original model. Instead, *William* approached a social network of women farmers he already knew. Together, they created a new and shared object. In the negotiation process, a new object, rules and a division of labour were created for the network of women farmers, which means that the network became an activity system capable not only of providing loans but also developing the knowledge of the farmers involved.

Just as with *Susanna, William* ended up in a loosely connected role in relation to the further development and implementation of the object. But where *Susanna* described her role as that of a visitor, *William* saw himself as an advisor.

Besides helping him become aware of his own capacity as a social innovator and fundraiser, I think *Urgent Evoke* provided *William* with an understanding of the structures and the level of collaboration that is needed in order for a social network like that of the women farmers to be able to function as the learning community that he would have liked his demo-farm to be. Both *Susanna* and *William* applied their capacity to recognise and develop activity systems interested in and strong enough to carry out the implementation of the objects developed, either in the game or post-game.

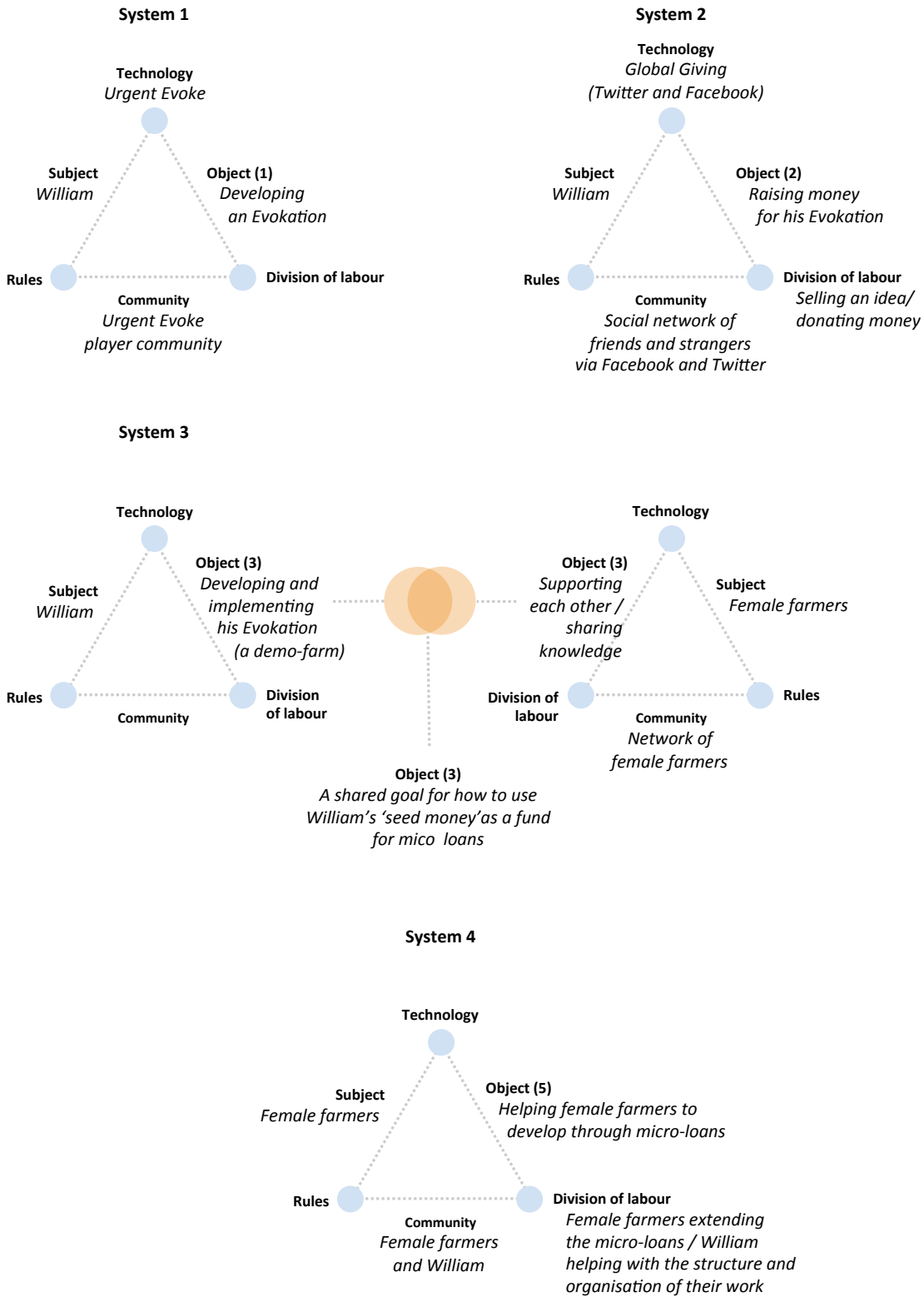


Figure 31: Visualisation of William's in- and post-game

Creating a new community
As mentioned earlier, *Michael* entered *Urgent Evoke* with an idea for a new library structure for Africa, an idea he developed further while living in Paris and playing *UE*.
After the game ended, *Michael* returned to the United States, was hired by an architectural firm and continued to develop and implement his Evokation.
He created a post-game activity system around his Evokation by pulling in resources from other activity systems that he was connected to.

First, *Michael* used the mentor awarded to him by the World Bank, who was an international businessman with a track record of dealing with social innovation projects. About the influence of the mentor *Michael* says:

> *So he [the mentor] steered me in the right direction, he helped me build a team, [when] he steered me he didn't actually go out and suggest people by any means …he has like been coaching me along the way. It is interesting that the project basically evolves at the speed with which I take advice. There is normally some time between [when) he tells me to do something and [when I do it efficiently, but by and large he has been very, very helpful and it has transformed the structure of the library.* (Michael)

The mentor helped *Michael* figure out what to do next in order to push the project forward. It seems as if the mentor provided *Michael* with ideas for actionable next steps, something that the game design offered during the game.

He also succeeded in building a network of helpers around the project who were willing to donate their brainpower and warm hands to the project:

> *It was easy to attract a couple of people that I knew and these people were good at infusing some energy at the beginning to organize the project.* (Michael)

But the group changed over time as a discussion of whether the project should be non-profit or for-profit ensued:

> *And we ended up going non-profit and that fractured the team in half. A couple of people are no longer associated with us. And also as you get through the start-up phase, some of the people that were helpful at the initial organisational moment, you know sort of life happens and they kind of drift away and other people have gone aboard since.* (Michael).

Michael managed to build a community around his Evokation and create a division of labour. As the activities changed, the members of the community also changed as new skills and resources are needed. To build his community, *Michael* drew on all his existing networks. He got his wife and his work colleagues involved:

> *I am running the project through them [his work colleagues], so that they feel like it is theirs and they think 'oh yeah, maybe we should do more of this, maybe we should go and raise money from our clients to do more of these',*

> *because their clients are people like Vodafone, Microsoft, Google and people like that, and all the oil companies that are extracting tons of resources from Africa.* (Michael)

Michael also managed to run a successful Kickstarter[26] campaign:

> *It raised $52,000 from 650 backers from 30 countries and a lot of people from* Evoke *helped out. So it is a very … I mean … the project has massive ambition, we would like to build a thousand libraries. It is not like it just flashed in to existence, it is a very entangled web. Anyway, we have $50,000 that we are spending right now to build the building.* (Michael)

I think *Michael* said it very well – that implementing his Evokation was like creating an 'entangled web'. He wove a complex network around his project in order to get the financial and human resources needed to succeed.

I cannot conclude that *Michael's* actions have a direct link to his playing *Urgent Evoke,* but I do think that the game at least strengthened his understanding of how one needs a community working together in order to innovate and generate social change. I can say more conclusively that the game provided him with resources in the form of a mentor and a community of players willing to help. The illustration below shows *Michael's pre, in and post game*:

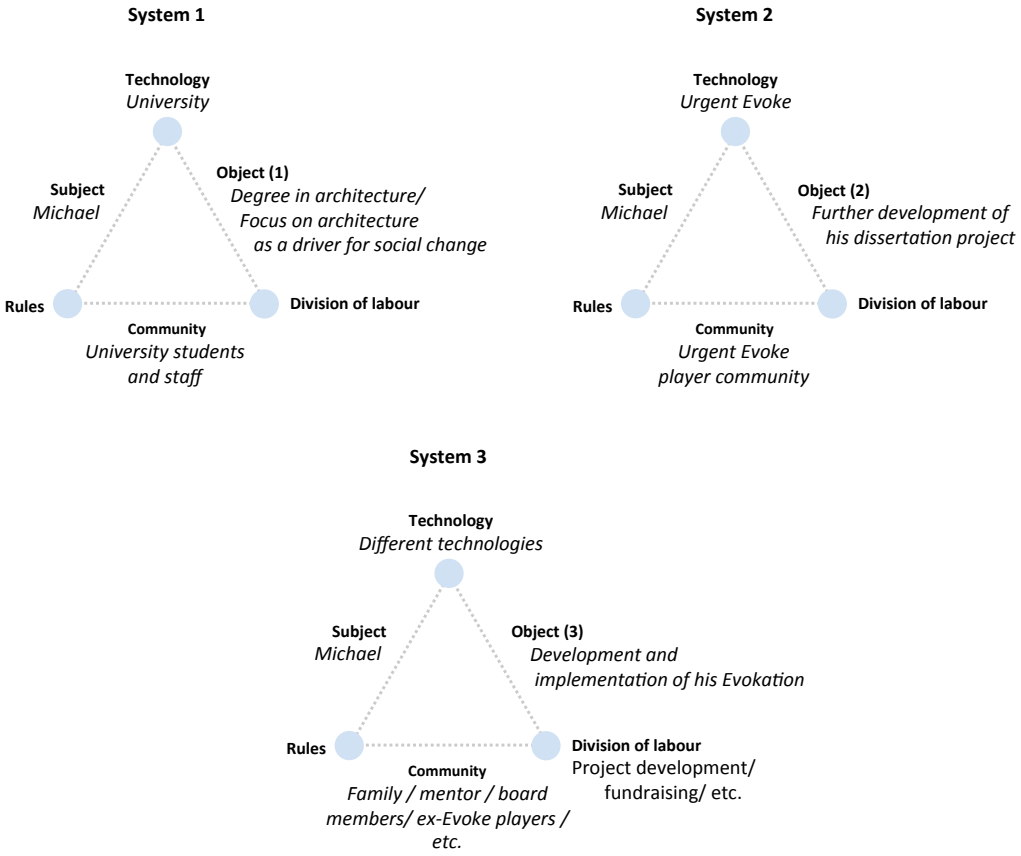


Figure 32: Visualisation of Michael's pre-, in- and post-game

[26] Kickstarter is a digital platform enabling the crowdfunding of creative ideas. See Kickstarter.com

Visiting different Activity Systems
At the end of *Urgent Evoke*, *Allan* realized that he wanted to quit his job and turn his Evokation into his living. His goal was to produce documentaries about developing issues and use them to create social change by educating and informing the people participating in his productions. Instead of entering into negotiations with an existing production company, *Allan* decided to create his own company, together with his female friend who introduced him to *Urgent Evoke*.

But once he reached the point of quitting his job to follow his dream, *Allan* identified a couple of stepping stones. First, he participated in the Global Giving contest, to which the World Bank awarded him access. Here he was able to raise money that he used to buy film equipment and to pay for a research trip to South Africa, where he shot some footage to get some experience. When he returned, he learned that YouTube has a competition to win a spot in a moviemaker course. *Allan* used his South African videos to enter the competition and was one of the ten winners. After the course, *Allan* quit his job and began to build the company described in his Evokation. Today, he is a self-employed filmmaker.

> *I saw Evoke as a program, as an investment in us. Even though there was no direct, 'here there is money', the resource of the game […] was kind of the seed that allowed everything else to grow. So a year later, YouTube has this program saying, 'if you want to be a filmmaker or content creator, create a small video and you make the chance to go out to LA'. They selected ten people to go out there and learn. It was perfect. […] I actually had footage from South Africa that shows in essence what I would ultimately like to create. So I was able to use that footage, create a video and then I used […] all the networking and fundraising mindset that I learned the previous year […] I wasn't raising money, but I had to get votes from the national audience. And so I won, and I wouldn't have been able to do that if I hadn't done any of the other things.* (Allan)

Allan's story outlines an alternative strategy to the one present in Engeström's 3GAT model. Instead of entering into a negotiation of his object with another activity system, *Allan* used other activity systems – the Global Giving competition and the YouTube film course – as steppingstones in his process towards becoming a filmmaker. The opening *Urgent Evoke* created for *Allan* is that the game allowed him to experience himself in a new way, which then enabled him to visualise and formulate a new personal goal. He entered the game as a young man in search for an identity and a purpose. During the game, he created an identity and a purpose for himself and became aware of what he needed to learn in order to unfold his personal dreams and his Evokation. *Allan* saw the Global Giving contest and the YouTube course as activity systems that could provide him with access to new resources that he needed to unfold his Evokation.

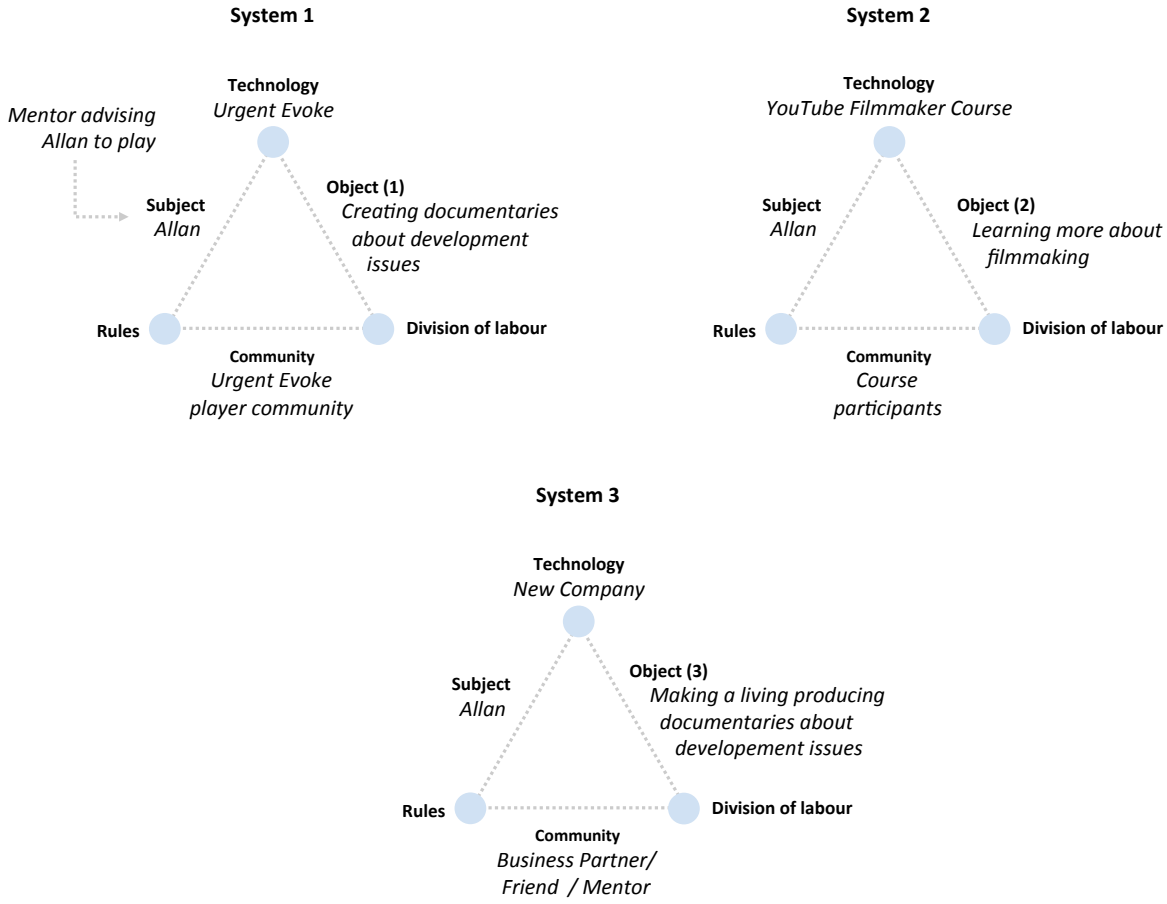


Figure 33: Visualisation of Allan's pre-, in- and post-game

Continuing the development process

Earlier in this chapter, *Jasper* related how he and *Jonas* and one or two other players got together after the game had ended in order to see if they could work together on the implementation of their ideas. I see this as an attempt to create a new community based on the old player community, but the collaboration did not last that long:

> *It was quite intense for those who participated more […] we lost a momentum. Then some people started working [together], and then, I guess because we […] didn't see the immediate feedback that we got in the game, like 'you did this – great!' and you know, like points and people encouraging you. It was like everyone lost momentum and then we […] lost coordination and plus this, there wasn't a very clear vision of what needed to be done.* (Jonas)

Jonas described how the group lost momentum because they became caught up in daily life, but more significantly because the instant feedback from other players and the clear goal or vision that the structure of the game provided were no longer there. He also blamed himself for not creating some of that structure post-game:

> *I think, it was a lot of my mistakes, because I didn't coordinated them, I don't know […] I should have taken a different approach, like I believe a lot in freedom and self-responsibility and people doing what they want to do on a more horizontal structure, but I think maybe, because we are in different*

> *countries, I should have just set up more specific goals and more specific dates […] I think people were expecting more leadership from me, maybe.* (Jonas)

But losing momentum with the group of former players did not stop *Jonas*. He kept working on his own Evokation, which was focused on urban gardening.
He experimented on his own rooftop: 'I got some lettuces, tomatoes, the carrots didn't work, but it is all part of a process' (Jonas). After some time practicing, he began helping friends build their own urban rooftop gardens. He used his off-line social network to build a community around his idea and through this network disseminated his vision and know-how. After some time, *Jonas* got a new job and had to move to another part of the country. Moving meant a change of scenery – and *Jonas* found himself in a situation where he had to relearn his newly established urban farming skills and build a new social network:

> *[…] the weather is very different from here, so everything changes, I had to re-learn a lot of the things I had learned. Bui it was good in another sense because I met people there and I learned how to grow this there in that weather and stuff like that* (Jonas).

Jonas learned how to farm in new weather conditions, and he also managed to build a new community. Based on these positive experiences he started to dream bigger dreams:

> *I have another project right now, […] and I think it is learning a lot from these experiences and it is expanding a lot, it is not going to be only about urban farming, it is going to be about the May Cube Movements, you know, like in a broad sense like farmers, and people doing urban farming, and people doing 3D printing, and people doing crafts, you know, trying to learn from this lesson and try to keep going.* (Jonas)

Since *Urgent Evoke*, *Jonas* went through several learning experiences, a process he described as in the following way:

> *I see it as three steps, first, I learned a lot in* Urgent Evoke*, second I learned a lot with my own project, thanks to* Urgent Evoke *and then hopefully I will take all those lessons into this project.* (Jonas)

As with many of his game colleagues, Jonas's way of handling the implementation of his Evokation also calls for alternations in Engeström's model:

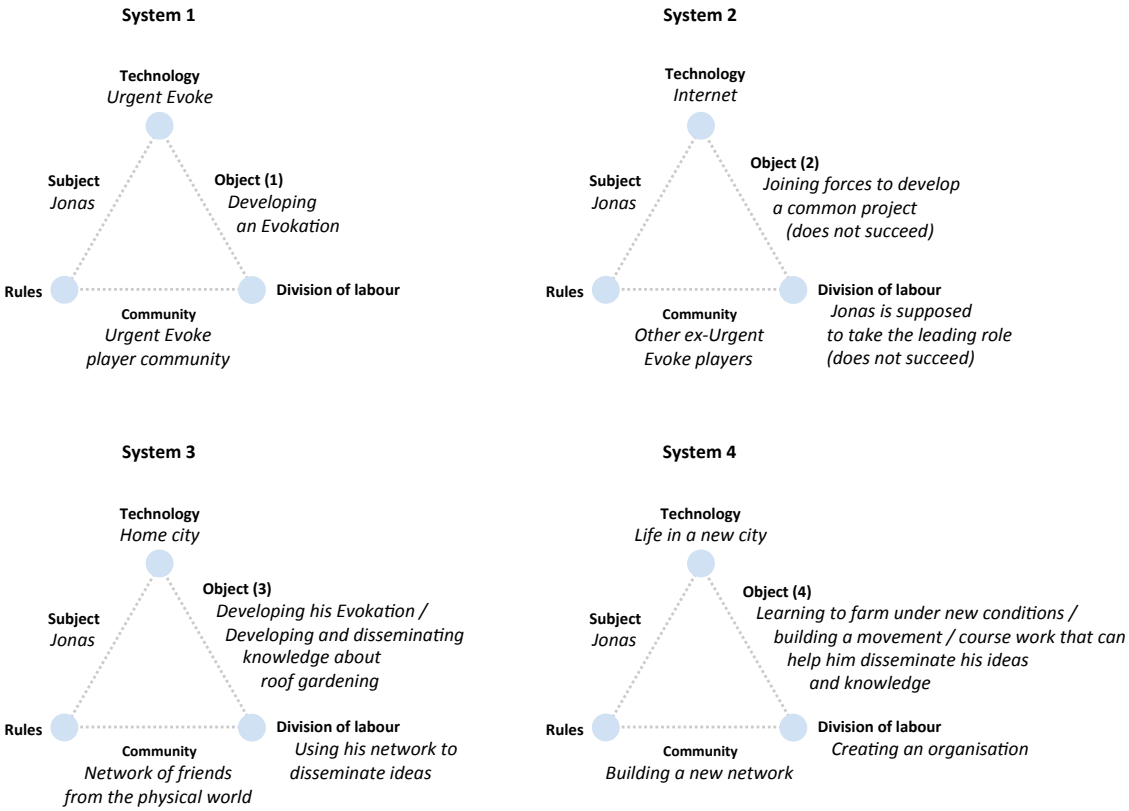


Figure 34: Visualisation of Jonas's in- and post-game

Jonas's process indicates that he used the elements that he met through the *UE* game in his own post-game process. He was aware that he needed to build up the core skills required to be an urban gardener and a social network to help him disseminate his knowledge and ideas. *Urgent Evoke* provided him with an approach to how to handle his own developing process as a social innovator; an approach that allowed him to expand his confidence, skills and ideas step-by-step:

> *So it [the game] has taken me from how I saw myself there […] to someone that can have a larger impact. […] I think that is so nice, […] I haven't said this out loud, but I am thinking about it, and it is such a nice change […] in my own perception of myself. So now I do believe I am a social innovator […] Maybe I knew before that I had an impact on a smaller scale […] but not in such a large scale and with subjects that are not necessarily related to what I went to school for.* (Jonas)

Partial conclusion
How did playing Urgent Evoke create openings for the winners' implementation of their Evokations post-game?

At the beginning of this section, we began the discussion with Figure 26, which depicts Engeström's third generation activity theory (3GAT). As noted then, I saw in the model a theoretical construction that would help me analyse and understand not only what happened during the *Urgent Evoke* game, but also what happened post-game when the players were supposed to develop their ideas further and implement them in the physical world.

But very early in my analysis of the data, I realised that the post-game reality of the players did not mirror the theoretical model because the game ended at the moment that the players were to begin to perform as social innovators off-line. The activity system that they had been embedded in, the community that had supported their development as social innovators and the magic circle that had provided them with a safe space to develop their ideas in had more or less ceased to exist. It was still possible for the players to visit *UE,* but the site was no longer a living platform but a silent archive. And the attempt to keep the community alive on Facebook only attracted a minority of players, and those who did participate turned it into more of a discussion group than a working community.

Designing the game to end at this crucial moment in the players' development process created a situation of dis-empowerment and left the winners alone in an already vulnerable situation. Given this situation, I was actually more surprised by the stories of the winners who in spite of it all still managed to push their Evokation forward than I was by the stories of the people who did not. But I was even more interested in finding out what had empowered them to handle the post-game situation.

From my analysis of the interviews with the winners who managed the post-game situation fairly well, a picture of multiple strategies emerges. They are:

- passing on an Evokation to a activity system one knows or to an activity system one helps build;
- becoming a member of an existing activity system and introducing one's Evokation to the system from an insider's position;
- building a community with other players, and then with friends and strangers, and using this community as a foundation for an expansion of the object and creation of a new activity system around that object;
- using a technology from the game to open the door to another activity system and gain a position to renegotiate and implement one's object in that system; and
- changing one's object so that it fits other activity systems where one can participate in the division of labour in these systems to develop and gain the resources needed to unfold one's own Evokation. Or, creating a new activity system around one's Evokation and drawing on one's different off-line networks as well as new connections to create a strong and resourceful community.

In the stories about the winners' post-game activities, I find artefacts or technologies from the game that have been a resource for the players – their connections to other players, the document stating that they are World Bank-certified social innovators, the seed money, the money from the Global Giving crowd funding competition and the mentor. I find evidence that the experience of playing the game empowered the players to see themselves as social innovators, and believe in their own voice and ideas. I also find evidence that the attention and social recognition contributed by the community of players provided the winners with the courage and desire to keep on developing their ideas as well as themselves.

But even though these material as well as social resources played an important role in the empowerment of the winners and influenced their capacity to move their Evokations forward, I think that the greatest impact of *Urgent Evoke* on the winners can be found on a more abstract level.

Urgent Evoke provided the players with an understanding of how social innovation takes place in a social system, i.e., as a collaborative process, not the work of a lonely genius. The game produced this understanding through its graphic novel about a heterogenic team saving the world, and its reward structure that acknowledged knowledge sharing and collaboration. I recognise in the winners' post-game strategies an awareness of this systemic understanding of human learning and development. I would therefore say that the winners' experience of the game design as an exemplary learning structure provided them with an ideal of what structures and elements are needed to support citizen-driven social innovation. And the winners who succeeded post-game are the people who were able to mirror that ideal, or at least elements of it, in their approach to their post-game situation.

In the following Chapter, the findings of the thesis are discussed and partial conclusions are drawn that are brought together in a final conclusion that answers the main research question.

Chapter 6

Conclusion

The aim of this thesis was is to answer this research question: *How did the interplay between the design of* Urgent Evoke *and the players' use and sense-making of the game create openings for an empowerment process that helped the winners of the game become post-game social innovators?*

In the introduction to this thesis, I examined Flyvbjerg's comparative analysis of Foucault's and Habermas's very different positions on how research can help strengthen civil society and bring about social change. I did so in order to position my own research among that of others dealing with the relationship between research, civic engagement and socio-political change. I described my position as a continuous movement between a Habermasian normative approach to research and a Foucauldian descriptive approach. I claimed that dealing with concepts such as democracy, civil engagement and social change in the context of the internet and social media, as I do in this thesis, is difficult if one is only descriptive and contextual, as articulated by Foucault, and never idealistic and normative, as articulated by Habermas.

My suggestion was therefore to hold on to both Foucault's and Habermas's ontological points of departure and strive for a continuous movement between the two positions. Such a movement has its roots in a normative interest in finding and using social media to generate bottom-up social change. This interest has motivated my research and in-depth descriptive and contextual analysis of how a social network game like *Urgent Evoke* can create openings for the empowerment of players to become post-game social innovators. In the end, I use the knowledge gained from the analysis to suggest how the process of democratic empowerment can be strengthened in future game designs. I am aware that these suggestions are an expression of a normative idea of how to create the ideal structures for a process of democratic empowerment, which, if implemented, should be subjected to a new analysis that can lead to a game (re)design.

I discuss in this Conclusion the findings of the thesis and answer the research question. While doing so, I pin-point the movements made between the epistemological positions described above.

In the first part of the thesis, I looked at *Urgent Evoke*'s design as an expression of a normative idea about how to design for civic engagement. I was interested in showing how the game design was intended to create public engagement and democratic empowerment among the players. The analyses indicated a game design intended to empower players in three distinct ways: by creating a combination of clear goal-based structure and an open-platform; by providing the players with a social network; and by perforating the magic circle of the game by blending the online and off-line world.

The design of *Urgent Evoke* was a mix of a clear goal-based structure and an

opportunity structure. The design was not intended to be a control mechanism: it was an invitation to participate. It offered players a very clear goal and a path of actionable next steps at the same time as it made room for the players to engage in ways that they themselves saw fit. The game did not force players to 'level up' or follow a planned path; instead, it allowed them to participate in the game by watching or commenting on the work of others, or by bringing in knowledge, ideas and resources that they found interesting and relevant to share with the community without attempting to win the game themselves.

Urgent Evoke's design can therefore be seen both as a top-down implemented structure as well as an open platform where bottom-up citizen-driven social innovation can unfold. By focusing both on the structure and the actor, the World Bank designed for a clear result (empowering players to become post-game social innovators). It also accepted the fact that in order to engage the players and empower them to become social innovators, designers must let go of some of the control and allow the players to create their own game and participate in different ways.

The openness of the *UE* design was intended to attract many different kinds of players and provide them with access to a social network where they could share and develop their socially innovative ideas. Designing for the formation of a social network was intended to provide the players with access to more resources and communicate an understanding of social innovation as the result of a process of co-creation where different actors play different roles. This 'meta' communication was meant to teach the players that social networks and collaboration are important elements for the creation of bottom-up social change.

By designing *Urgent Evoke* as a 'fantasy infused reality', the designers attempted to let the players play with reality in a controlled way. The design was meant to give the players an experience that would allow them to start seeing themselves as social innovators and thereby empower them to play the same role outside the magic circle of the game. In that sense, *Urgent Evoke* can be seen as a test site where players can practice certain activities in a safe environment before they try to do the same in the physical world.

In the second part of the thesis, the design's intentions, or the ideal, met the players, their sense-making and their use of the design. The analysis conducted here is not a critical analysis that reveals power structures, as Foucault might have done. It is a rich and thorough description and analysis that leads to a complex understanding of how the intentions of the design unfolded in game play. By doing so, the design was opened up for critique, which produced suggestions for how future design can help strengthen the intended empowerment process.

The analysis in Part two was split into three sections that focus on the pre-game, in-game and post-game phases respectively.

My analysis in the first section showed that the openness of the design enabled

players with very different motivations to find their way into the game and make the decision to play. This created an opening for the formation of a diversified community of players where those with different voices, views and experiences were invited to participate.

On the one hand, the analysis showed that the data from *Urgent Evoke* matched previous research on player motivations, although the motivation to escape mentioned in other research did not seem to be relevant in this game. But on the other hand, the analysis also challenged previous research by suggesting that *UE* players were motivated to play because the game offered them the possibility of engaging in some of the World's most wicked problems in a controlled way. The idea that the game merged the off-line and the online worlds made sense to most of the players interviewed – they were drawn to the chance of playing with reality without the fear of negative consequences or of making mistakes.

In my opinion, the analysis of the first phase of the empowerment process demonstrated a game design that lived up to a 'Habermasian' ideal of a public sphere, where a large and diversified group of people come together in order to share, discuss and develop socio-political ideas. The openness of the game design allowed the players-to-be to make sense of the game in different ways, thereby enabling players motivated for different reasons to find their way into the game and start playing it.

The second section of the analysis, which focused on the in-game phase of the game play, showed that *Urgent Evoke* reproduced an old social media 'rule-of-thumb' that suggests only about 1% of all users will create unique content. This held true for *Urgent Evoke*: only 73 of the 6,618 players who completed at least one mission or quest went all the way and created an Evokation.

But even though the number of Evokations was relatively low, the social network analysis also showed that all the winners – even those who thought of themselves as 'lone wolves' – were embedded in the social network of the game in a way that afforded them access to different types of resources that supported their decision and capacity to produce an Evokation. The results of the social network analysis were enhanced by the interviews, which illustrated how the winners were empowered by different forms of micro-donations made by other players, most of whom probably participated for reasons other than the desire to win. In that sense, the second section of the analysis re-confirmed the conclusion of the first section: that the game owed much of its democratic strength to the openness of the design that allowed the players to participate in the game in many different ways. This openness led to the creation of a diversified and rich player community that provided the winners with access to a supportive and resourceful network willing to participate in a division of labour that empowered the winners to produce an Evokation.

This analysis also showed how important the social network, the divisions of labour among the players and the micro-donations made in the game were for the winners' development. In this way, it challenges the focus on 'creators' found in much of the literature on social media and in the World Bank's focus on

empowering players to become post-game social innovators. This analysis challenges us to see the achievement of *Urgent Evoke* not as the 32 Evokations produced during the game, but as the game's capacity to attract and engage a large number of people and make them interested in donating their time and attention to the community in order to collectively pursue the goal of the game.

In other words, while not every citizen is ready to go all the way and make the effort it takes to become a social innovator, a large number of citizens are interested in social-political issues and are willing to contribute to the development of a greater good if they can do so in a light and easy way that makes sense to them. In this perspective, the challenge is not to design games that generate socially innovative winners, but to design games that facilitate and acknowledge micro-contributions as a legitimate and valuable form of participation, which thereby makes it possible to cultivate diversified socially innovative communities.

This second section of the analysis showed conclusively that the game design created a space that approached the ideal of a democratic public sphere, because it allowed for a very diversified community to emerge, for different voices to be heard and for different forms of participation to take place.

But when I apply Foucault's approach, I find that the analysis also calls for changes in the game design. The analysis demonstrated that the acknowledgement of micro-donations should be strengthened in future designs. The strength of *Urgent Evoke* was its ability to create openings for the participation of many people from all over the world who were willing to make (micro-)donations to the game in many different ways. These donations were very important for winners because they helped empower them to go all the way in the game and turn in an Evokation. Therefore, it is important that the game's design recognise the value and role of these kinds of donations to the results of the game. This recognition would help create an even larger, more diversified and active player community, which would enhance and strengthen the democratic potential of the game.

The third section of the analysis, which was concerned with the post-game situation of the winners, created a more mixed picture of the game design's ability to create openings for the empowerment of the winners than the two previous sections. The analysis of the post-game situation led me to conclude that the winners were left on their own to a very large extent at a very critical moment in their empowerment process. The game design offered a structure that empowered the players to develop an Evokation, and to think of themselves as possible post-game social innovators. It provided them with some resources (an Evokation, seed money, a World Bank certificate, etc.) that could potentially function as an opening for their lives as post-game social innovators.

But because the game ended at the exact moment that the winners were to make the transfer from the magic circle of game to the physical world, the winners were also stripped of a lot of the resources that had been made available to them throughout the game. This arguably abrupt end to the game and left the winners to

manage the passage between online and off-line more or less single-handedly. Even though the winners still had access to the *UE web*site, this was now an archival site and not the home of a living community willing to cheer and support the winners in their post-game endeavours.

But despite this dis-empowerment, some of the winners still succeeded in moving their Evokation forward. I see some common traits among them. These players were able to identify existing activity systems that could host them and their Evokation, or they were able to build new activity systems around their Evokation. In other words, the players who succeeded were the ones who had learned not just to develop socially innovative ideas, but who on a meta-level had learned from the design of the game that human development and innovation is a social process and not the result of the work of a lonely genius.

Again, looking at the third section of the analysis through my Habermasian-Foucauldian bifocal lens, I see a game design that in the final phase of the empowerment process did not live up to its intention to empower players to become post-game social innovators.

First, the design did not prepare the players for some very basic questions in the physical world – such as how to find the money and the time needed to implement one's social innovative ideas. These questions are very relevant in the physical world, but were scarcely addressed in the game. From a Faucauldian perspective, if the game designers really wanted to empower the players to be social innovators in the physical world, they should not shield the players from the realities of that world. Instead, the designers could perforate the magic circle even more and address mundane issues such as where to find the time and money needed to implement the social innovations, thereby better preparing the winners for the post-game challenges waiting for them.

Second, a Foucauldian critique would also suggest that the game designers dis-empowered the winners at the exact moment that they were about to test their wings as social innovators in the physical world. A future game design should therefore look more like Engeström's model and keep the winners embedded in a living activity community that can provide support in the post-game implementation process. By keeping the game alive and the magic circle open for a longer time, the designers would allow the winners to move back and forth between the online and off-line world. This would create a more equal situation for the winners who might need to negotiate their Evokations with other activity systems or build new activity systems in the implementation process.

Third, the analysis showed that the group of winners who succeeded in developing their Evokation post-game were not only empowered by their experiences *in* the game but also by their experiences *with* the game design. This means that players were 'reading' the game design, and were able to transfer some of the design principles to the physical world, thereby creating a supportive structure around their implementation process. This leads me to conclude that when we design games like *Urgent Evoke*, we need to think of the design as an Habermasian exemplary model of how social innovation could be facilitated, because the players

learn from the structures of the game design and use the design principles in their post-game activities.

Future designs of games like *Urgent Evoke* that have civic empowerment intentions should learn from the combination of *Urgent Evoke*'s top-down implemented structure and the creation of an open platform that would generate a diversified and active player community. Designers should offer the players a mix of supporting structures and access to different kind of resources. But they should also accept that if they want to generate citizen-driven social change, they must be ready to lose some control and allow the players themselves to make-sense of the game.

Furthermore, a game's focus should not be on creating winners, but on supporting the development of a socially innovative community where all participants are recognised for the contributions they make to the shared goal of creating innovative ideas and empowering some players to implement the ideas post-game. Game design should also be thought of as a long-lasting activity system that can support the permanent development process of social innovators, one that continues to exist as players transcend the perforated magic circle and test their wings in the physical world.

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