# Persuasive Structures in Advergames

# Conveying Advertising Messages through Digital Games

# Persuasieve Structuren in Advertentiegames Reclameberichten overbrengen door middel van digitale games

(met een samenvatting in het Nederlands)

#### Proefschrift

ter verkrijging van de graad van doctor aan de Universiteit Utrecht op gezag van de rector magnificus, prof. dr. G.J. van der Zwaan, ingevolge het besluit van het college voor promoties in het openbaar te verdedigen op maandag 17 maart 2014 des middags te 12.45 uur

door

Teresa de la Hera Conde-Pumpido

geboren op 7 mei 1981 te Palma de Mallorca, Spanje Promotor: Prof. dr. J.F.F. Raessens Co-promotor: Dr. S. Lammes

# **Table of Contents**

Acknowledgements	i
Preliminary Notes	iii
Preface	v
Introduction	1
Significance of this Study	1
Theoretical Framework and Research Problems	5
Research Questions	10
Methodology	10
Structure	15
1. Digital Games as an Advertising Medium	19
1.1. Advergame's Definition	20
1.1.1. Previous Definitions of Advergames	21
Chen & Ringel on Advergame's Definition	21
Mallinckrodt & Mizerski on Advergame's Definition	22
Heide & Nørholm Just on Advergame's Definition	23
Selva Ruiz on Advergame's Definition	24
1.1.2. A New Definition of Advergame	25
An Advergame is a Digital Game	25
An Advergame is Specifically Designed for a Brand	37
An Advergame Aims to Convey an Advertising Message	39
1.2. Advergames' History	41
1.2.1 Advergames' Precedents	41
1.2.2. The Earliest Advergames	43
1.2.3. Innovations in the Industry	45

Console Advergames	45
Online Advergames	48
Social Advergames	50
Mobile Advergames	52
Pervasive Advergames	54
1.3. Advergames' Effectiveness	58
1.3.1. The Factors that Determine Advergames'	
Effectiveness	58
1.3.2. An Overview of Advergames' Effectiveness Research	61
2. A Critical Analysis of Procedurality	67
2.1. Previous Research on Persuasive Communication	68
2.2. Ian Bogost on Persuasive Games	70
2.3. Ian Bogost on Advergames	75
3. Persuasive Communication through Digital Games	85
3.1. A Theoretical Model for the Study of Persuasive	0)
•	86
Communication through Digital Games	
3.1.1. Why a theoretical Model?	87
3.1.2. How can a theoretical model be described?	87 88
The Purposes The Assumptions	89
Structure of the Model	89
Visual Representation of the Model	96
<del>-</del>	
3.2. Persuasive Dimensions in Advergames	97
3.2.1. Linguistic Persuasion 3.2.2. Visual Persuasion	98
3.2.3. Sonic Persuasion	103 107
	112
3.2.4. Haptic Persuasion 3.2.5. Procedural Persuasion	115
3.2.6. Narrative Persuasion	120
The Story	120
The Story The characters	123
The Space	125
3.2.7. Cinematic Persuasion	128
3.2.8. Sensorial Persuasion	133
3.2.9. Affective Persuasion	134
J.Z., Thicetive I cloudsoid	101

3.2.10. Tactical Persuasion	136
3.2.11. Social Persuasion	139
4. Persuasive Strategies for Advergames	145
4.1. Advergames' Objectives	146
4.2. Integration of Products in Advergames	150
4.3. Advergames' Target	154
4.4. Advergames' Visibility	158
4.5. Advergames' Credibility	160
4.6. Advergames' Playability	162
Motivation	163
Learnability	164
Memorability	165
Efficiency	166
Utility	167
Satisfaction	168
5. Tem de Tank / A Case Study	171
5.1. Tem de Tank's Advertising Strategy	173
Tem de Tank's Advergame's Objectives	173
Tem de Tank's Product Integration	175
Tem de Tank's Advergame's Target	177
Tem de Tank's Advergame's Visibility	178
Tem de Tank's Advergame's Credibility	179
Tem de Tank's Advergame's Playability	181
5.2. Tem de Tank's Persuasive Dimensions	184
Tem de Tank's Linguistic Persuasion	184
Tem de Tank's Visual Persuasion	190
Tem de Tank's Haptic Persuasion	194
Tem de Tank's Procedural Persuasion	197
Tem de Tank's Narrative Persuasion	200
Tem de Tank's Social Persuasion	202
5.3. Tem de Tank's Persuasive Structure	203

Conclusions	205
Directions for Further Research	209
References	213
Ludography	227
Biography	231
Appendix 1	233
Appendix 2	237
Samenvatting (summary in Dutch)	239

# Acknowledgements

Writing this thesis has been a long journey of pursuit and self-discovery. Now that I have found the way out of the big maze I have been exploring for a few years, I know that I would have never achieved my goal without the support of all of the people who have accompanied me during this journey.

I am particularly grateful to Joost Raessens, who believed in my project and gave me the confidence that I needed. His support and constructive comments on my work helped me to grow as a researcher and to complete the dissertation you are reading today. I offer my deep gratitude to Sybille Lammes, who also guided me in this difficult journey. In every talk we had her astute comments on my work pinpointed exactly what needed to be done and were indispensable during this process. I also want to thank Xosé López, who was my supervisor during the first stage of my thesis and the person who introduced me to the academic world.

I would like to express my gratitude to the Research Institute for History and Culture (OGC) for believing in my project and giving me the support to finish it. I also thank Simone Veld, José van Aelst and Christien Franken for their valuable backing. Special thanks to my colleagues at Utrecht University and the Center for the Study of Digital Games and Play (GAP). I also thank Jeroen Jansz, Ben Schouten, Miguel Sicart, William Uricchio and Jeffrey Goldstein, members of my dissertation committee, for engaging with my work.

I also want to acknowledge here some game scholars who during this process have inspired me in very different but helpful ways: Teun Dubbelman, Clara Fernández-Vara, Pilar Lacasa, Ian Bogost, Lindsay Grace, María Ruth García Pernía and Fermín Cicauriz.

Carlos Toural, Moisés Limia, Marta Pérez, Silvia Roca and Amanda Paz: thank you so much for the long chats, the coffees and the laughs. Manu Lago, Diego Barreiro, Fran Riveiro, María Puertas, Cristina Balboa, Elena Bermúdez, María Fernández, Alberto Mancebo, Jorge Álvarez, Rubén Lemetre and all those who have ever patiently listened to me talking about my thesis, thank you so much for being there for me.

Mum, Dad and Javier thank you so much for supporting me in pursuing my dreams. I am also incredibly grateful to have a wonderful and supportive family who cares so much for me.

Rata, thank you so much for sitting next to me in the cold days of winter while I was writing.

Walmor, I have no words. I love you.

# **Preliminary Notes**

This dissertation is focused on the study of advergames. Advergames are understood in this thesis as digital games specifically designed for a brand with the aim of conveying an advertising message. This is a new definition that I propose for the term that applies to the objectives of this dissertation and that will be explained and defended in detail in Chapter 1.

I have illustrated this dissertation with numerous and heterogeneous examples of advergames that I describe in detail with the aim of supporting my arguments. Furthermore, with the intention of facilitating the understanding of the content of this dissertation, I have created an online database that contains direct links to those advergames that I mention in my dissertation and that are still available to be played online. The same database contains audiovisual material of those advergames that are no longer available to be played. I highly recommend that readers consult this database while they are reading this thesis in order to better understand the games that I will be discussing because in some cases the examples will be of special relevance in following my arguments. The mentioned database is available here: teresadelahera.wordpress.com.

For those readers who are not familiar with this type of digital game I have selected five illustrative advergames that I recommend to be played before reading this thesis. Playing these games will provide readers a clear idea about the object of study of this dissertation. The mentioned list is available here: teresadelahera.wordpress.com/top5.

Some parts of this dissertation have been previously published:

- Parts of Chapter 3 "A Theoretical Model for the Study of Persuasive Games" appeared in "A Conceptual Model for the Study of Persuasive Games" a paper presented at the 6th Digital Games Research Association (DiGRA) Conference in August 2013 in Atlanta.

#### **Preface**

One of the reasons I am writing a PhD thesis on digital games is the significant evolution of the game industry since the turn of the twenty-first century. As a player, I have experienced the consequences of this evolution in my own relationship with digital games. Therefore, I would like to explain how my relationship with digital games has evolved during the course of my life and how advergames have become meaningful in this process and to introduce to the reader the reasons that led me to conduct research in this field.

I am part of the first generation of digital natives, which means that I grew up as digital technology was introduced into our daily lives. Furthermore, I was incredibly lucky to have a father who wanted me to experience that process first hand. I can clearly remember our first computer without hard drive, my neighbor Nacho teaching me to write MS-DOS commands and the first day I saw Windows running at my friend Eva's. However, what is meaningful here is that the reason why I approached each of these new technologies that came into our home was digital games.

Before I was ten years old I was already spending many hours playing MS-DOS games such as *The Secret of Monkey Island* (LucasArts, 1990), *Indiana Jones and the Fate of Atlantis* (LucasArts, 1989) and *Maniac Mansion* (LucasArts, 1987). My first console, a Nintendo NES, was a present from my grandfather. In fact, it was a present for all his grandchildren, so we had the opportunity to play with it only when we were at his home in Madrid (Spain), far away from Palma de Mallorca, the city where I was living at that time. Therefore, when my cousins and

I were at my grandparents' for Christmas or other occasions, we used to spend the whole day playing *Super Mario Bros*. (Shigeru Miyamoto, 1985) and *Tetris* (Pajitnov, 1985). Fortunately, my father understood that we needed to have one of *those machines* and, cleverly, he one day came home with a Computer Video Game, a pirate version of the Nintendo NES with more than 300 hundred games on its hard drive! My brother and I then spent whole afternoons and weekends playing games such as *Mario Bros* (Shigeru Miyamoto, 1983), *The Legend of Zelda* (Nintendo, 1986), *Burger Time* (Data East, 1987) or *Circus Charlie* (Konami, 1984). Many other consoles and games came later into our home without our mother's consent.

Until I was in my late teens I always had a computer game or console game, or maybe both, that I used to play avidly. The last games I remember playing at that time are *Super Mario 64* (Nintendo, 1996) and *The Sims* (Electronic Arts, 2000). Furthermore, I remember playing *Sophie's World* (Learn Technologies, 1997), an educational game which taught me a lot about philosophy. However, although digital games were so meaningful to me during my childhood, at one point I stopped playing them regularly for a long time. I used to think that this break occurred because I had started college and my leisure time had almost disappeared. Nevertheless, over the years I have realized that it simply began to be difficult to find games that satisfied me as much as others I had played before.

Telling this story is important to me because it was precisely an advergame which few years later, in 2005, brought digital games back into my daily life. The advergame that I am talking about is 20 Lives¹ (Nokia, 2005), an audiovisual online adventure game designed to advertise Nokia mobile phones. In the game players were invited to participate in a twenty-day game show in which they had twenty-four hours to face each of the twenty challenges of the game. Information provided within the twenty challenges and related to Nokia devices was necessary to pass a final test. I remember that there was a text at the beginning of every life warning the player that it was a "broadband event" and "it might take a while" to load the scene. I had a really poor connection at that time, but I did not care about waiting a long time

<sup>&</sup>lt;sup>1</sup> Play 20 Lives: www.prize-entry.com/game/index\_main.html.

*Preface* vii

every day to be able to play the game because it was worth the time and effort. 20 Lives became so significant to me that it reignited my interest in digital games which since then has become not only part of my leisure time but also my field of academic research. Therefore, when I started my Research Master's degree in Communication and Advertising in 2006, I decided to focus my attention on the study of persuasion in advergames.

Years later, when I started my PhD thesis, although technology had evolved a lot since 20 Lives was launched, I was not able to perceive the same evolution in the way digital games were being used to convey advertising messages. The research in this field that I have conducted during the time I was writing my Master's Thesis, the several advergames that I have analyzed during that time and the multiple interviews that I have done with professionals working in the advergames' industry, led me to conclude that there was a lack of understanding of how digital games can be used to convey advertising messages. I noticed that this lack of understanding produced advergames that were not taking advantage of the potential of digital games to convey advertising messages. Therefore, I concluded that a better understanding of the potential of digital games to convey advertising messages could help in the design of improved advergames. Thus, I decided to write a PhD thesis to shed light on this field not only for academic purposes but also to advance the advergames' industry. In the following pages the reader will find the result of a long journey of study and writing, which is my contribution to the understanding of a vast field that it is still not fully explored.

This thesis aims at broadening the understanding of how advertising messages can be embedded within digital games. The intention is to provide valuable knowledge on this subject that can be useful for both academic and non-academic purposes. The knowledge furnished by this dissertation is intended for scholars interested in the field of persuasive games. Furthermore, this work also aims to help rationalize the decision-making related to the embedding of advertising messages within digital games during the design process of an advergame.

# Significance of this Study

According to the game scholar Ilha Vedrashko, the origin of advergames can be dated to the early 1980s, and it is even possible to find some precedents in the 1960s and '70s (Vedrashko, 2006b). However, the term was not coined until 2000 when the entrepreneur Anthony Giallourakis, owner of the domain www.advergames.com, understood that "the market for interactive casual Internet based gaming would be too appealing to corporations for them to ignore the marketing and branding opportunities associated with casual gaming on the Internet" (Giallourakis, n.d., para. 1) and decided to coin the concept and

buy several domains related to it. One year after the concept was coined by Giallourakis, the conceptual artist Jonathon Keats was the first to define it in his column *Jargon Watch* in *Wired* magazine as "a downloadable or Web-based game created solely to enable product placements" (Keats, 2001).

The evolution of the game industry and changes in the advertising landscape in recent years are responsible for the increasing interest of marketers in using digital games for advertising purposes. The development of new technologies and the spread of broadband and mobile devices have facilitated the growth of the game industry<sup>2</sup> and the popularization of digital games, which undoubtedly are related to the increasing interest in the use of digital games as a marketing strategy.

One of the results of the changes in the game industry was what was dubbed by Jesper Juul as the Casual Revolution, "a breakthrough moment in the history of video games" (2010, p. 2). This revolution is a process in which digital games have become more normal and part of people's daily routines for three reasons. Firstly, these new digital games, known as casual games, do not ask players to readjust their schedules as they can be played anytime and anywhere thanks to their presence on mobile devices. Think for example of an employee playing Angry Birds (Rovio Mobile, 2009) on the train on her/his way home. Secondly, casual games do not require players to spend hours to get anywhere in a game; for example a player who is chatting with a friend on Facebook can leave the conversation for a moment to enter Farmville (Zynga, 2009), collect some vegetables, and return to the chat before his friend has noticed the absence. Finally, casual games "fit the social contexts in which people are already spending their time" 3 (2010, p. 1). Console games such as Guitar Hero (Harmonix Music Systems, 2003) and mobile

<sup>&</sup>lt;sup>2</sup> DFC Intelligence, a strategic market research and consulting firm focused on interactive entertainment, forecasts that consumer spending on video games will grow to over \$81 billion by 2016. The firm has reported that the worldwide video game industry generated \$67 billion in 2011 (DFC Intelligence, 2011).

<sup>&</sup>lt;sup>3</sup> The Essential Facts About the Computer and Video Game Industry report reveals that in 2011, 65% of North American gamers played games with other gamers in person — figures show a 64% increase in 2010 and 62% in 2009— and that 45% of parents play computer and video games with their children at least once a week, a 36% increase over 2007 (Entertainment Software Association, 2011)

games such as *Fingle* (Game Oven, 2012) are perfect examples of games which are part of social gatherings such as parties. Therefore a digital game that brings together these three characteristics is appealing not only for players, but also for marketers who find in them an attractive medium to convey advertising messages without disturbing consumers.

Besides the evolution of the game industry, the changes in the advertising landscape have also facilitated the popularization of advergames as a marketing strategy in recent years. The poor economic conditions and the declining readership of printed media<sup>4</sup> have motivated marketers to shift their budgets from traditional to interactive media.<sup>5</sup> Interactive tools are considered less expensive, more measurable, and better than traditional media in provoking a direct response (Forrester, 2009, p. 2). Some of the strategies in which marketing departments are investing are search marketing<sup>6</sup> (that includes paid inclusion and search-engine optimization, SEO), integrated campaigns in social media, display advertising and viral marketing. However, banners, pop-ups, and pop-unders, the most popular advertising models on the Internet, are considered ineffective because the user often perceives them as a nuisance. They work much better when located on sites with related content (see McCoy, Everard, Galletta, & Polak, 2004, p. 4). The current trend of advertising to morph into another form of entertainment seems to offer ways to overcome consumer resistance to advertising messages.7 This form of

<sup>&</sup>lt;sup>4</sup> "Consumer readership of newspapers and magazines has dropped 17% and 6%, respectively, since 2004 while offline publishers have struggled to translate their impression-based ad sales model into viable online business" (Forrester, 2009, p. 2)

<sup>&</sup>lt;sup>5</sup> In 2011, advertisers spent \$80.2 billion dollars on the online market, which is a 17.2% growth from 2010. The worldwide ad spending total came to \$496.9 billion in 2011, up from \$475.7 billion in 2010, and online advertising market growth is playing a big role in these numbers (Nielsen, 2011).

<sup>&</sup>lt;sup>6</sup> "Search marketing is the application of all tactical elements associated with the search industry and manipulated to form a plan or strategy to achieve online goals" (Colbon, 2006, p. 3). In 2008, Google earned \$15 billion from this form of advertising (Karp, 2008).

<sup>&</sup>lt;sup>7</sup> Empowered consumers today expect a customized, interactive brand experience that goes way beyond a 30-second television spot or two-dimensional print ad. Forty-two percent of online adults and 55% of online youth want to engage with their favorite brands through social applications" (Forrester, 2009, p. 2).

advertising blurs conventional distinctions between advertising and entertainment. It is essentially a fusion of the two into one product, generally funded entirely by a brand or corporation and intended to be distributed as entertainment content, albeit with a highly branded quality.

Given these factors, marketers, aware of the opportunities presented by a diversifying and expanding digital-games-playing population, also started taking advantage of this tendency of advertising to morph into another form of entertainment, which resulted in increasing investment in advergames. Nowadays advergames can be found in branded microsites, game portals, social media and application stores. People play them on mobile phones, desktop computers, laptops and tablets, and the most successful ones are spread virally worldwide.

A good example of the potential of advergames to become successful advertisements is *Hotel 626* (Goodbye, Silverstain, & Partners, 2008), a scary advergame released to bring two Doritos snacks flavors back from the dead during Halloween. This advergame was selected as one of the twenty-five case studies that illustrate the book *The Best Digital Marketing Campaigns in the World* (D. Ryan & Jones, 2011). In the game, which was available to be played only in the dark from 6 p.m. to 6 a.m., players were trapped in a hotel and they needed to find their way out. More than twelve million visitors played *Hotel 626* for an average stay of thirteen minutes per person/session. Moreover Doritos' Halloween flavors sold out in stores within three weeks of launch (D. Ryan & Jones, 2011, p. 40).

Nonetheless not all advergames can be used as examples of successful advertising campaigns. One of the main reasons for this uneven performance is the lack of knowledge that marketers and marketing companies have about the potential of digital games as a medium to

<sup>&</sup>lt;sup>8</sup> According to the strategic market research company DFC Intelligence, in 2011 advertisers spent in North America alone over \$1 billion advertising their products and services through digital games. This includes in-game advertising, around-game advertising, and advergames. By 2014, the company expects that figure to nearly double to over \$2 billion. Among the different marketing strategies using digital games to advertise products or services, the report reveals a remarkable growth in the advergaming strategy that managed to grab \$344 from that \$1 billion in 2011 and which DFC Intelligence predicts will "account for about 78% of total game advertising revenue" by 2016 (DFC Intelligence, 2011).

convey advertising messages. The development of an advergame is a process in which the client and the company responsible for the game design need to communicate in order to create the most efficient product according to the needs of the advertising campaign. In some cases the client will get directly in contact with the game studio responsible for the game design, and in other cases a marketing company will mediate between the two. However, many marketers and marketing companies, even those specialized in digital marketing, still lack knowledge of game design. Furthermore, most game designers in turn lack knowledge of marketing and persuasive strategies. This situation results in an underutilization of the potential of digital games as an advertising medium<sup>9</sup>. Furthermore, there is still a lack of reliable data on advergames' effectiveness, as will be illustrated in Chapter 1 (section 1.3.), and thus there is unwillingness to invest in costly projects.

In summary, although digital games have been used for more than three decades as a medium to convey advertising messages, the lack of knowledge on this subject has led advergame designers to borrow creative strategies from other media which do not always work due to the interactive nature of digital games. In addition, many advergames' concepts are designed by marketing companies who are more worried about conveying an advertising message than about creating games that motivate players to play them and keep playing. It follows that a better understanding of how digital games can be used to convey advertising messages could be an important contribution not only to the academic study of this subject but also to the advergames' industry.

#### Theoretical Framework and Research Problems

In this research I approach the study of advergames through an interdisciplinary theoretical framework. This framework consists of theories from game studies, media studies and studies on persuasion

<sup>&</sup>lt;sup>9</sup> It follows that the development of an advergame is a process in which many human actors are involved, namely corporate decision-makers, marketing directors, advergames' developers, advertisers, etc. In order to facilitate the reading of this thesis, henceforth I will use the word "brand" as an abstract term to refer to the different human actors involved in this process.

undertaken from a humanities perspective. This interdisciplinary approach allows me to broaden the understanding of how persuasiveness can be implemented within digital games by forging new interdisciplinary links within the area of game studies where the emphasis of this study clearly lies while also taking up new subjects that are important to this field. Furthermore, I look at contemporary design theories and their relation to games as well as how this relationship may be used in a practical context.

The academic study of embedded arguments in digital games started taking shape with the game scholar Ian Bogost's first two books (2006, 2007), which were the starting point of the procedural school, followed not just by academics (e.g. Brathwaite & Sharp, 2010; Mateas, 2005; Swain, 2010; Treanor & Mateas, 2009), but also by the game industry. Bogost claims that digital games are not "characterized by their ability to carry images, but by their capacity for operationalizing rules" (2007, p. 171) and defines the term procedural rhetoric with the remit of explaining what he identifies as the "unique persuasive powers" (2007, preface ix) of digital games and the way they mount arguments and influence players. The term procedural rhetoric was proposed by the author to refer to "the art of persuasion through rule-based representations and interactions rather than the spoken word, writing, images or moving pictures" (2007, preface xi). Procedural rhetoric is the practice of using processes persuasively (2007, p. 3) and what interests proceduralists is the way in which symbol manipulation of processes that initially appear unexpressive may result in a higher order of expression.

However, although procedural rhetoric is undoubtedly useful in understanding the way arguments can be embedded in the rules of a game, different authors have already found shortcomings in Bogost's claims (e.g. Ferrari, 2010; Heide & Nørholm Just, 2009; Sicart, 2011). Game scholar Miguel Sicart published in 2011 an article, *Against Procedurality*, that has initiated a debate about the validity of *proceduralism*. In his article Sicart claims that Bogost discounts player expression, turning play into an instrumental action (2011, p. 7). Following the same argument, game scholar Simon Ferrari points out that disregarding player creativity may result in games in which player choices can lead to a manipulation of the dominant rhetoric intended by the game designer (2010, preface x). I argue that the use of procedural

rhetoric is not always useful or at least sufficient on its own to address all advertising goals and that other persuasive dimensions should be taken into consideration to understand the way digital games convey advertising messages. Therefore, I disagree with Bogost's definition of persuasive games as "videogames that mount procedural rhetoric effectively" (2007, p. 46). Furthermore, although Bogost includes advergames, political games, and educational games under his definition of persuasive games, I consider that, for example, educational games can be, but are not always, persuasive. Accordingly, I argue that it is necessary to propose a new definition for the term persuasive games.

In the same vein, I also disagree with Bogost's definition of *advergames* because I claim that advergames can be, but are not always, "simulations of products or services" (2007, p. 200). Other definitions proposed by other scholars (e.g. Heide & Nørholm Just, 2009; Mallinckrodt & Mizerski, 2007; Selva Ruiz, 2009) for the term *advergame* also present difficulties. Accordingly, I consider that it is also necessary to propose a new definition for the term *advergame* that applies to the purposes of this thesis.

Other research that has been conducted in the fields of game studies (e.g. Ferrari, 2010; Frasca, 2007; Olsen, Procci, & Bowers, 2011; Salen & Zimmerman, 2004; Sicart, 2011), humanities (e.g. Burke, 1969; Forceville, 2007; Miller, 2002; Saussure, 1983; Walz, 2003), media studies (e.g. Heide & Nørholm Just, 2009; Jenkins, 2004; Murray, 1997) and psychology<sup>10</sup> (e.g. Dal Cin, 2004; Green, 2002; Kollock, 1999; Lee, 2009) can be helpful to understand the persuasive potential of additional dimensions beyond the procedural rhetoric within digital games. However, it is necessary to structure all the information that can be found in these studies and understand how it can be applied to the particular case of advergames.

In this thesis I make use of an interdisciplinary framework to outline a theoretical model with the purpose of structuring the existing knowledge that can help to explain how persuasive communication works within digital games. A theoretical model is built to "explain the phenomena that [one] is trying to understand" (Williams, 2003, p. 17)

 $<sup>^{10}</sup>$  I acknowledge that there is a long tradition in the Psychology of Persuasion that can be useful for the study of effectiveness of advergames. However, that exploration is beyond the scope of this thesis.

and can be considered an empirical theory. "The aim of a theory is to make visible the invisible structure that orders and confers intelligibility" (Elsaesser & Buckland, 2002, p. 5) upon the phenomena that one is trying to explain. With this theoretical model I aim to provide a new theoretical perspective that helps to make visible how persuasiveness can be structured within digital games. The theoretical model will serve to identify specific aspects of advergames' persuasive structure and to analyze them from a new and specific perspective. <sup>11</sup> It follows that my investigation is primarily theoretical; however, though this study is not empirical per se, its aim is to contribute to the theoretical framework for empirical research in this field. Consequently, at the end of this thesis I include a case study that shows the usefulness of this study for empirical research.

In order to describe the internal persuasive structure of persuasive games I start by focusing my attention on how other scholars have explained how digital games convey meaning (Bogost, 2007; Raessens, 2009; Salen & Zimmerman, 2004; Sicart, 2011). A critical analysis of this literature allows me to identify several dimensions involved in the production of meaning within digital games. In this thesis, I subscribe to the idea that players generate the final meaning of a play experience while they play a particular digital game in a given context. Yet to understand how digital games can be used with persuasive intentions which is the case with advergames—, it is first necessary to study how they can be designed to convey meaning, and how affordances of the game invite specific players' performances. The context of playing can transform the meaning authored into digital games and generate new meanings to a certain extent, and context has an important role in persuasiveness. Yet the design of a game gives a particular direction to modes of playing. Due to time constraints I limit my attention to studying how digital games can be designed to convey meaning. Thus this dissertation will offer a first model of how games are and can be designed to convey persuasive messages. And I will offer a benchmark for further research. It is beyond the scope of this dissertation to study how players generate new meaning while playing persuasive games and to test how the context influences this process. However, in this thesis I

<sup>&</sup>lt;sup>11</sup> In section 3.1. I describe in detail the reasons why I chose to work with a theoretical model and how a theoretical model can be described.

produced knowledge that can be used to conduct studies focused on both questions.

In order to understand how affordances of the game invite specific players' performances I rely on game scholars Salen and Zimmerman's (2004) findings. Salen and Zimmerman refer to semiotic principles to explain that players make meaning when they interpret a series of signs within a system to establish relationships between them. Furthermore, the authors explain that the context in which these signs are interpreted affects the way the player makes sense of them (Salen & Zimmerman, 2004, p. 364). Following this reasoning, I make the assumption that persuasiveness can be implemented within digital games by making use of three persuasive levels that are related to the signs embedded within the game, the system that allows players to interact with the signs of the game and the context in which games are played. I claim that within these three levels of persuasion it is possible to situate multiple persuasive dimensions related to all the questions discussed above.

Although the theoretical model proposed in this thesis will illuminate how persuasive communication can be implemented within digital games and therefore will be useful for the study and design of persuasive games, it is also important to underline here that each type of persuasive game has a series of characteristics that should be taken into consideration when analyzing or designing its persuasive structure. Accordingly, I claim that advergames have special characteristics that differentiate them from other types of persuasive games and that should be studied separately. The goals of advergames and the attitude of players towards advertising messages distinguish advergames from educational games, for example. Whilst a positive attitude can be expected from players towards the learning goals of educational games, it is important to underline that advertising messages are usually an unwanted form of communication (see Messaris, 1997, p. 5). Therefore, it is conceivable that advergame players would not be expecting to be persuaded during a game session. It follows that advergames need to overcome players' resistance to the persuasive message (see Klimmt, 2009). In this study I will identify the factors that should be taken into consideration in order to analyze or design persuasive strategies for advergames.

In conclusion, in this thesis I will be using an interdisciplinary theoretical framework to propose new definitions for the terms

persuasive games and advergames. Furthermore, I will develop a theoretical model for the study of persuasive communication within digital games. In addition, I will identify the factors that should be taken into consideration when analyzing or designing persuasive strategies for advergames.

### **Research Questions**

Taking into consideration all of the above, this study tries to answer the following main research question: How can advertising messages be embedded within digital games to become meaningful from the brand's and from the player's perspective?

To answer this question, I have to answer the following subquestions:

- 1. How can an advergame be defined and what are the factors that determine its effectiveness? (Chapter 1. Digital Games as an Advertising Medium)
- 2. How should the study of persuasive communication through digital games be approached? (Chapter 2. A Critical Analysis of Procedurality).
- 3. How can persuasive messages be conveyed through digital games? (Chapter 3. Persuasive Communication through Digital Games)
- 4. Which are the factors that determine the conceptualization of persuasive strategies for advergames? (Chapter 4. Persuasive Strategies for Advergames)

## Methodology

To achieve the objectives of this study I have used qualitative triangulation techniques. By definition, triangulation techniques "attempt to map out, or explain more fully, the richness and complexity of human behavior by studying it from more than one standpoint" (Cohen, Manion, & Morrison, 2000, p. 141). The use of different methods to draw the conclusions of a study allows one to compare the results obtained from all of them, increasing the researcher's confidence in the validity of the conclusions. It follows that the use of this multimethod approach helps prevent a distorted picture of the subject being investigated.

I make use of theoretical and methodological triangulation to answer the research questions of this study. Theoretical triangulation refers to the use of "alternative or competing theories in preference to utilizing one viewpoint only" (Cohen et al., 2000, p. 142). In this case, I started this research by conducting a literature review of previous works from the fields of game studies, media studies and studies of persuasion undertaken from a humanities perspective. The use of theoretical triangulation is suitable in this case because the knowledge produced in the three disciplines mentioned above is of special relevance for the understanding of the object of study of this dissertation. This technique serves to propose a new definition for the term *advergame* and also to identify the factors that determine its effectiveness (RQ1).

In order to determine how to approach the study of persuasive communication through digital games (RQ2), I undertake a critical literature review of previous research conducted in this field. This critical literature review serves not only to pinpoint the statements of other scholars with which I agree or disagree but also to gather some arguments that, through the use of triangulation techniques, I have been able to employ to outline a theoretical model for the study of how persuasive messages can be conveyed through digital games (RQ3).

Although models are theoretical, they need to be tested in experiments to demonstrate their validity and to prove their capacity to offer new insights on existing knowledge. After experiments are conducted, "often models have to be modified in response" (Barlow & Mills, 2009, p. 10) to their results. However, without the theoretical model "those experiments would not have been carried out, and the knowledge which arises would have remained unknown" (2009, p. 10). In this case, in order to propose and validate the different versions of the theoretical model preceding the stable model that is presented in this thesis, I have made use of theoretical triangulation and methodological triangulation. Methodological triangulation consists in applying "different methods on the same object of study" (Cohen et al., 2000, p. 142). In this case, I made use of two qualitative techniques for the methodological triangulation: content analysis and in-depth interviews.

Content analysis is "a set of techniques used for the analysis of communications that draw upon systematic and objective procedures to describe the content of the messages" with the purpose of "inferring knowledge about the conditions of production (or eventually of

reception), with the support of indicators (quantitative or not)"12 (Bardin, 1986, p. 29).13 Content analysis has the purpose of identifying what is communicated, who communicates it and why, and what effects that communication produces. Compared to other research techniques that can be applied to the analysis of advertising messages, content analysis offers a number of advantages that make it a particularly useful technique in this field. It is non-intrusive, which helps to reduce the subjectivity that the researcher can add to a study of this nature. Furthermore, content analysis can be applied to any form of communication, "regardless of the nature of its support" (Bardin, 1986, p. 22). It follows that this technique is appropriate for the analysis of the object of study of this dissertation.

It is also worth noting that content analysis is sensitive to the context in which the message is conveyed, which allows approaching the analysis of the object of study as part of a communication system in which the context plays an important role. Another advantage is that content analysis tries to understand the data obtained as symbolic phenomena and not as a set of physical events, and in the field of advertising the study of meanings is essential.

Content analysis techniques were used in three rounds in this study. In a first round an initial sample of advergames was analyzed with the objective of creating a first version of the theoretical model. I decided to use the Favorite Website Awards' (FWA) database to determine my sample. The FWA is an industry-recognized Internet award program established in May 2000. It is the most visited website award program in the history of the Internet, with over 9011 million visits by May 2010. The sample chosen for this study includes fifty-eight advergames given awards by the FWA between 2003 and 2013 (see Appendix 1). In order to select the games for the sample, I chose among all the advergames given awards between 2003 and 2013: (1) the advergames that were available to be played, and (2) advergames in English, Spanish and Portuguese, due to my language skills.

 $<sup>^{\</sup>rm 12}\,\rm Translated$  by the author from Spanish into English.

<sup>&</sup>lt;sup>13</sup> See also Björk & Holopainen, 2005; Consalvo & Dutton, 2006; Grace, 2012; Zagal, Mateas, Fernández-Vara, Hochhalter, & Lichti, 2005.

In order to outline the first version of my theoretical model, I followed the four steps proposed by the film theorists Casetti and Di Chio (1994, p. 34): (1) segmentation: in this step I used theoretical triangulation to divide the object of analysis into several parts; (2) stratification: in this step I used theoretical triangulation and the observations made during the content analysis of the fifty-eight advergames to identify different internal elements within each of these parts; (3) enumeration and classification: in this step I created a small descriptive map that has helped me to continue the process; (4) regrouping and modeling: in this final step I proposed a representative model for the object of study. This process enabled me not only to propose the first version of the theoretical mode for the study of persuasive games but also to identify the unique characteristics of advergames that need to be taken into consideration when designing a persuasive strategy for this type of persuasive game (RQ4). The theoretical model can be used to conduct in-depth analysis of the persuasive structure of an advergame taking into consideration the unique characteristics of such persuasive games.

Once the first version of the theoretical model was proposed I applied it to conduct in-depth content analysis of seven Spanish and Dutch advergames (see Appendix 2). In order to conduct the in-depth content analysis, I selected the seven advergames detailed in Appendix 2 according to the following criteria: (1) I decided to work with Spanish and Dutch games because I wanted to have the opportunity to visit the game studios to discuss in person with the game designers the results of the analysis; (2) I decided to work with advergames focused on the most common products advertised using this strategy (sportswear, candies, drinks, cars and food for children); and (3) I decided to use advergames developed by recognized game studios in this field (all the advergames selected for this sample were designed by award-winning studios).

In a next step, I visited the game studios in which the seven advergames of the second sample were designed to conduct in-depth interviews with the designers. As a methodological technique, an interview is a "flexible tool for data collection, enabling multi-sensory channels to be used: verbal, non-verbal, spoken and heard" (see also Brennen, 2013; Cohen et al., 2000, p. 350) used for "an interchange of views between two or more people on a topic of mutual interest" for

knowledge production (2000, p. 349). In this case, I conducted informal, conversational interviews divided into five parts:

- (1) In the first part I introduced the objectives of the study and the interview.
- (2) In a second part I asked several questions in which I collected information about the objectives of the advertising campaign, the design of the advertising strategy, the design process of the game, and other information that may be relevant to understand the circumstances under which the game was developed, such as the budget or the time dedicated to the development.
- (3) In the third part I explained the methodology used for the analysis of the game, and I discussed the results of the analysis with the designers with the objective of validating the conclusions drawn from the analysis.
- (4) In a fourth part I proposed and discussed possible solutions to the problems identified during the analysis with the objective of validating the usefulness of these solutions.
- (5) Finally, in the last part I discussed the validity of the theoretical model with the designers, and I asked for suggestions for its improvement.

The data collected during the in-depth interviews were used to reconsider the validity and stability of the theoretical model and served to produce a new version. The new version of the theoretical model was used in a third round to conduct a new in-depth content analysis of one of the eight games of the previous round. In this case, the game selected for this final analysis was Tem de Tank (DDB Amsterdam & Flavour, 2010). The results of this analysis are presented in Chapter 5 of this thesis to illustrate the validity and usefulness of the theoretical model. The reason for selecting this game as a case study is that although the advergame's goals were properly defined, the game also contains a series of problems in terms of persuasion. I consider that most of the flaws found in this advergame result from a lack of deep understanding of how digital games can convey meaning and how they can be designed to persuade players. Therefore, this game is a perfect case study to exemplify how the theoretical model presented in this thesis can be useful to identify problems in the persuasive structure of advergames.

In conclusion, the combination of theoretical and methodological triangulation techniques is used to answer the research questions of this

study. The qualitative triangulation techniques were used to propose a new theoretical model for the study of persuasiveness within digital games by taking advantage of the interdisciplinary theoretical framework employed in this study and making use of different qualitative techniques to validate and improve the model.

#### Structure

The first chapter, called 'Digital Games as an Advertising Medium', aims to answer the first research question of this study: *How can an advergame be defined and what are the factors that determine its effectiveness?* This chapter consists of three sections entitled 'Advergames' Definition', 'Advergames' History' and 'Advergames' Effectiveness'. The first section focuses on the definition of an advergame. This section reviews previous definitions and proposes a new one, which aims to be more accurate.

The second section of the first chapter provides an historical overview of advergames. Advergames' precedents and evolution is an unexplored topic. The only text that I could find on this subject, written by the advertising scholar Ilya Vedrashko in 2006, remains unpublished. This section gathers the information collected by Vedrashko and enhances and updates it with new data. The intention of this section is to illustrate that despite the fact that technology has rapidly evolved and has given rise to many different forms of advergames, each one of them with characteristics that can be exploited to enhance branded experiences, these features are not always exploited and are sometimes incorrectly utilized because of a lack of understanding of the medium.

Finally, the third section of the first chapter focuses on advergames' effectiveness. The academic study of advergames has been orientated primarily towards reception analysis. However, it is usual to find articles in which the effectiveness of advergames is assessed by applying methodological frameworks borrowed from other fields and not designed specifically to be applied to this object of study (e.g. Pinto Neto, 2007). The objective of this section is to identify which factors determine advergames' effectiveness.

The second chapter, called 'A Critical Analysis of Procedurality', aims to answer the second research question of this study: *How should* 

the study of persuasive communication through digital games be approached? In Chapter 2 I undertake a critical review of the literature of previous research which has contributed to understanding how games can be used to convey advertising messages. This literature review is organized around Bogost's theory on procedural rhetoric due to the high relevance of the procedural school to the study of digital games' persuasiveness. This literature review is divided into two main sections: in the first section I focus the analysis on Bogost's definition and study of persuasive games, and in the second section I analyze Bogost's application of his theory about persuasive games to the domain of advergames. The objectives of this literature review are to pinpoint the statements of other scholars with which I agree or disagree and to gather and develop the main arguments that allow me to outline a theoretical model for the study of how persuasive messages can be conveyed through digital games, which I present in the next chapter.

The third chapter, called 'Persuasive Communication through Digital Games', aims to answer the third research question of this study: How can persuasive messages be conveyed through digital games? In this chapter I propose a new theoretical model for the study of how persuasive messages can be conveyed through digital games. The objective of developing this new model is to broaden the understanding of how persuasive communication can be implemented within digital games.

The fourth chapter, called 'Persuasive Strategies for Advergames', aims to answer the fourth research question of this study: Which are the factors that determine the conceptualization of persuasive strategies for advergames? This chapter is focused on identifying the factors that determine the conceptualization of advertising strategies for advergames. Identifying these factors also serves to specify which characteristics of advergames need to be considered for the conceptualization of advertising strategies for this medium.

In the fifth chapter I use my theoretical model as a tool for the analysis of the advergame *Tem de Tank* (DDB Amsterdam & Flavour, 2010). The analysis of the persuasive structure of the game allows me to identify several flaws made in the use of the different persuasive dimensions of the game and to propose design solutions. Consequently, this case study serves to illustrate the validity of my theoretical model.

Each of these chapters adds a new layer of inquiry, which ultimately sheds light on a topic scarcely explored hitherto. The theoretical contribution of this thesis is a fundamental step that can facilitate more exhaustive studies of advergames' effectiveness in the future, an argument that I will revisit in the last chapter of this thesis, the conclusions. Furthermore, the following chapters try to use game studies, media studies and persuasive studies approached from a humanities perspective to provide the necessary theoretical knowledge to exploit the full potential of digital games as an advertising medium. Ultimately, this study does not aim to produce a conclusive, allencompassing theoretical model of advergames' persuasiveness but, by focusing on persuasive structures, contributes to a better understanding of the way digital games can convey advertising messages.