PERSUASIVE STRUCTURES IN ADVERGAMES

CONVEYING ADVERTISING MESSAGES THROUGH DIGITAL GAMES

TERESA DE LA HERA CONDE-PUMPIDO

Persuasive Structures in Advergames

Conveying Advertising Messages through Digital Games

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(met een samenvatting in het Nederlands)

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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 Lives*[1] (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

[1] Play *20 Lives*: www.prize-entry.com/game/index_main.html.

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.

Introduction

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[2] 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

[2] 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).

[3] 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[4] have motivated marketers to shift their budgets from traditional to interactive media.[5] 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[6] (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

[4] "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)

[5] 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).

[6] "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).

[7] 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.[8] 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

[8] 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[9]. 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

[9] 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 Proceduralityy,* 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[10] (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)

[10] 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.[11] 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

[11] 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 sub-questions:

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 multi-method 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.

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[12] Translated by the author from Spanish into English.

[13] 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, all-encompassing 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.

1. Digital Games as an Advertising Medium

As previously stated in the introduction, the objective of this dissertation is to answer the 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? However, before addressing that issue —which will be done in Chapters 3 and 4— it is necessary to have a clear comprehension of what an advergame is —the issue addressed in this chapter— and why it is necessary to understand how to use it to convey advertising messages —an issue addressed in Chapter 2. The objective of this chapter is to answer the first research question: *How can an advergame be defined and what are the factors that determine its effectiveness?* This chapter is divided into three sections that outline the fundamentals needed to understand the focus of this research and its scope: advergames' definition (section 1.1.), advergames' history (section 1.2.) and advergames' effectiveness (section 1.3.).

The first section aims to propose a definition of the term *advergame* that is aligned with the purposes of this study. In order to propose an accurate definition, I undertake a critical overview of definitions previously proposed by other scholars.[14] Then I propose my own definition, which is followed by a detailed justification of all its elements.

[14] Chen & Ringel, 2001; Heide & Nørholm Just, 2009; Mallinckrodt & Mizerski, 2007; Selva Ruiz, 2009.

The second section of this chapter is an analytical review of advergames' history. Advergames' precedents and evolution in history have been left largely unexplored and therefore need special attention so that we may grasp the scope of advergames. An analytical review of advergames' history allows us to understand the evolution of this practice over the years.

The third section of this chapter is focused on understanding the factors that determine advergames' effectiveness. This is followed by a critical review of previous research accomplished in the field of advergames' effectiveness. This critical review serves to illustrate the importance of broadening the understanding of the way digital games can embed advertising messages, as will be explained in Chapter 2.

1.1. Advergame's Definition

As mentioned before, the term advergame was initially defined by the conceptual artist Jonathon Keats in his column *Jargon Watch* in *Wired* magazine as "a downloadable or Web-based game created solely to enable product placements" (Keats, 2001). However, advergames are not only downloadable or web-based games as they are also available on other platforms and in other forms such as console advergames,[15] which are distributed in a physical format. A good example is the console advergame *Volvo: Drive for Life* (Xbox, 2005) released only for Xbox console. Furthermore, advergames are not created solely to enable product placements but also to convey advertising messages, which do not always use product placement.[16]

The purpose of this section is to propose an accurate definition for the term 'advergames' that is in tune with the purposes of this dissertation. Since the term was first coined and defined, a growing

[15] Console advergames are advergames designed to be played on videogame consoles.

[16] "As an advertising technique, product placement involves inserting a brand or product into a movie, television show, book, or video game" (Glass, 2007, p. 23). As will be further explained, product placement is one of the techniques that can be used within advergames to convey advertising messages, but it is not always used, and much less is it the sole function of advergames.

number of scholars have turned their attention towards advergames and have proposed several definitions applicable to the different purposes of their studies.[17] However, none of the definitions previously proposed include all of the elements that I think are necessary to define this practice precisely and to differentiate it from other marketing strategies.

Although it is not the aim of this thesis to collect all definitions proposed for the term advergame, some of them are reviewed here to establish a more accurate definition. For this revision I have selected the most cited, and thus most prevalent, definitions of the term while disregarding less current definitions I found, which presented inaccuracies similar to those analyzed below. After a critical review of previous definitions proposed by scholars for the term 'advergames', I will propose my own definition.

1.1.1. Previous Definitions of Advergames

Chen & Ringel on Advergame's Definition

A definition commonly cited by scholars[18] was proposed in 2001 by Jane Chen & Matthew Ringel, analysts at the interactive agency <kpe>, in their "white paper" report *Can Advergaming be the Future of Interactive Advertising?*.[19] In their text, the authors define advergaming as "the use of interactive gaming technology to deliver embedded advertising messages to consumers" (Chen and Ringel in Theodorou & Sirmakessis, 2009, p. 1).

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[17] See Bogost, 2007; Cauberghe & De Pelsmacker, 2010; Chang, Yan, Zhang, & Luo, 2010; Heide & Nørholm, 2009; Hernandez & Chapa, 2009; Hernandez, et al., 2004; Lee, Choi, Quilliam, & Cole, 2009; Mallinckrodt & Mizerski, 2007; Purswani, 2010; Selva Ruiz, 2009; Theodorou & Sirmakessis, 2009; Vedrashko, 2006; Winkler & Buckner, 2006; Wise, Bolls, Kim, Venkataram, & Meyer, 2008.

[18] See Bogost 2007, p.152; Heide & Nørholm, 2009, p.55; Pinto Neto, 2007, p.4; Theodorou & Sirmakessis, 2009, p.1.

[19] *Can Advergaming be the Future of Interactive Advertising?* was the first of a bimonthly series of free "white paper" reports, called "Fast Forward," featuring original research on, and analysis of, digital media issues. This report was written by Jane Chen and Matthew Ringel who were then working for the consulting firm <kpe>. The report is no longer available online (see Afshar, Banerjee, & Jones, 2004, p. 382).

An interesting point of Chen and Ringel's definition concerns the nature of advergames. The authors refer to the use of "interactive gaming technologies" instead of the use of "digital games" to deliver advertising messages. However, the use of interactive gaming technologies does not necessarily result in a digital game but can result in other kinds of interactive content such as an interactive movie, which can make use of interactive gaming technologies to engage its audience. An example of this technique is the interactive branded movie *Being Henry* (Rover, 2011) released by Land Rover to convey the features and benefits of the Range Rover's Evoque model. The outcome of the movie depends on the viewer's choices for the film's protagonist. Each choice that viewers make for the lead character, Henry, influences the particular set-up of the new model of the Evoque that is presented to the viewer when the film has finished. For example, if the viewer chooses to ignore Henry's family re-union to spend time with a young waitress, the car he ends up with is the two-door coupe version, rather than the five-door family version. The story has a total of nine different story lines and thirty-two potential endings. The idea of multiple choices is meant to embody the wide variety of options available for Range Rover's Evoque model.

Being Henry (Rover, 2011) uses interactive gaming techniques to engage the viewer and provide a unique experience. However, the final result is a movie and not a digital game. I claim that advergames are always digital games and not any other kind of interactive branded experience. Audiovisual entertainment contents other than digital games which are used as advertising media should in fact be labeled as 'advertainment' (Martí Parreño, 2005, p. 29). Therefore, Chen and Ringel's definition is imprecise and can lead to misunderstandings because it can be applied to contents that are not advergames.

Mallinckrodt & Mizerski on Advergame's Definition

Although the term advergames has been related to digital games since the moment it was conceived, the marketing scholars Victoria Mallinckrodt and Dick Mizerski[20] link the definition of advergames to

[20] Mallinckrodt & Mizerski, specialized in marketing research, conducted a study that aimed to analyze the effects that playing an advergame had on young children's perceptions, preferences and requests (2007).

games in general, not only to digital games. The authors define an advergame as a "form of branded entertainment that feature[s] advertising messages, logos, and trade characters in a game format" (2007, p. 87). However, digital games have characteristics that clearly differentiate them from other kind of games, thus their persuasive potentials as advertising media are unique and should be studied separately (see p. 25 of this thesis). Therefore I consider it more appropriate to limit the use of the term advergames solely to digital games.

In addition, Mallinckrodt & Mizerski focus their definition on the way brands are embedded within games. The authors state that games feature advertising messages, logos and trade characters to produce branded entertainment. However, the use of logos or trade characters represents just two of the multiple techniques that can be employed to embed advertising messages in games (see Chapter 3 of this thesis). Therefore, I consider it inapt to include in advergames' definition a list of the different techniques that can be used to convey advertising messages, inasmuch as it is impossible to include a complete list of them without it being excessively long. It can be concluded that, although Mallinckrodt & Mizerski's definition of advergames is not necessarily wrong, it is at least incomplete.

Heide & Nørholm Just on Advergame's Definition

Another interesting definition was proposed by the media scholars Jonas Heide and Sine Nørholm Just[21] who define an advergame as a "game whose main purpose is to boost sales of a product or service, whether through increased brand recognition, increased linking or other methods" (2009, p. 54). In this definition authors again opt to relate the concept advergame to games in general, which I disagree with (see p. 22 of this thesis) since it fails to recognize the specific procedural structures of advergames.

The definition proposed by Heide & Nørholm Just is focused on the purpose of advergames, which they state is to boost sales of a product or service, and the methods used to address that purpose. However, the

[21] Heide & Nørholm Just are specialized in online communication and conducted research focused on the rhetorical potential of advergames in which they include their definition of advergames (2009).

purpose of advergames is not always to produce purchases as Heide & Nørholm Just claim. The purpose of the messages conveyed through advergames are the same as the messages conveyed through other types of media. Therefore, all advergames "are not, should not, and cannot be designed to produce immediate purchases on the part of all who are exposed to it" (Lavidge & Steiner, 1961, p. 59).[22] Furthermore, the strategies used in advergames are as varied as the pursued intentions. Thus, there is no point in mentioning an incomplete list of methods in a definition, which should be well demarcated and accurate. To sum up, although Heide & Nørholm Just's definition provides an interesting approach to the concept, it is also is inaccurate and incomplete.

Selva Ruiz on Advergame's Definition

The most precise definition I have found was proposed by the business communication scholar David Selva Ruiz[23] who defines an advergame as a "videogame financed by an advertiser and created for a product or brand with an advertising intention"[24] (Selva Ruiz, 2009, p. 151). The author mentions in his definition a relevant issue missing from the definitions proposed by other scholars, namely that an advergame is specifically designed for a product or a brand. This is a point that deserves special attention, and I will come back to it later (see p. 37).

Furthermore, if an advergame is designed with an advertising intention, it would follow that an advertiser should finance it, as Selva Ruiz suggests in his definition. However, I would not include this stipulation in advergames' definition. Let us think for example about the possibility that a game studio decides to reward its best client once a year with a free advergame design. In that case the advertiser would not be financing the design, but it does not mean that the game is no longer an advergame. Therefore, although Selva Ruiz's definition is quite precise and complete, there are some small changes I would make in order to have a more accurate definition.

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[22] Advergames' intentions are further explained in Chapter 4.

[23] David Selva Ruiz conducts research in the field of business communication and proposed a definition for advergames in a paper in which he analyzed digital games as tools for advertising communication (2009).

[24] Translated by the author from Spanish into English.

1.1.2. A New Definition of Advergame

Based on the critical analysis of previous definitions for the term 'advergame', I propose here a new definition that aims to be more accurate. With the purposes of this thesis in mind, I claim that an advergame is a digital game specifically designed for a brand with the aim of conveying an advertising message.

This definition can be divided into three parts, which will be explained in depth below. The first part of the definition, in which I assert that 'an advergame is a digital game', aims to describe advergames' characteristics. The second part of the definition, in which I state that advergames are 'specifically designed for a brand', aims to differentiate advergames from other type of marketing strategies using digital games. Finally, the third part of this definition, in which I claim that advergames have the 'aim of conveying an advertising message', tries to clarify the objective of this marketing strategy.

An Advergame is a Digital Game

Previously, I claimed that although other types of games can also be used to convey advertising messages, the term 'advergames' has been associated with digital games since its inception in 2000 (see p. 22 of this thesis). In this section I provide arguments to support this statement, including examining the use that has been made of the term since it was coined. Furthermore, I will argue that digital games have characteristics that clearly differentiate them from other kinds of games. Thus, their persuasive potentials as advertising media are unique and should be studied in their own right. To illustrate this argument I address the definition of digital games to identify those properties that make them unique media to convey advertising messages.

As previously stated, the use of the concept advergames has been linked to digital games since it was coined in 2000 by Giallourakis. The word is the result of combining the two most important concepts related to the phenomenon: advertising and online games. Furthermore, Jonathon Keats' first definition also proposed linking the term exclusively to digital games (Danesi, 2009, p. 11).

Moreover, most of the definitions proposed by scholars also refer to the digital nature of advergames.[25] And those definitions that do not allude to the digital nature of advergames (e.g. Heide & Nørholm Just, 2009; Mallinckrodt & Mizerski, 2007) are part of research focused on topics related to digital games.

Having illustrated the historical relationship of the term advergames to digital games, let us proceed by identifying the properties of digital games that make them unique advertising media. For this purpose, I will start from the definition of games, to determine the particular attributes of digital games and consider the advertising potential of particular attributes.

There are multiple scholarly definitions for the term *game*. All these definitions have been carefully reviewed by Katie Salen and Eric Zimmerman in their book *Rules of Play: Game Design Fundamentals* (2004, pp. 73-80) and by Jesper Juul in his book *Half-Real: Videogames between Real Rules and Fictional Worlds* (2005, pp. 29-36). Rather than revisiting all these definitions, in this work I make use of Salen & Zimmerman's highly regarded definition because it includes the key points that allow me to answer my main research question: "a game is a system in which players engage in an artificial conflict, defined by rules, that results in a quantifiable outcome" (Salen & Zimmerman, 2004, p. 80).

Following Salen & Zimmerman's definition, games should be considered as systems defined by rules. The authors define a system as a "set of parts that interrelate to form a complex whole" (2004, p. 55) and identify four elements that all systems share: objects, the parts within the system; attributes, the qualities of that system and its objects; internal relationships among the system's objects; and an environment that surrounds the system. Thus, if the environment that surrounds the system is an element of it, the physical medium of a game is a defining feature of it. In digital games framed as systems, digital technology should be considered as one element of the system (2004, p. 91). Therefore, the authors assume that digital games have special qualities that, while they may also be present in non-digital games, are more characteristic of the digital variety. Those traits are: immediate but

[25] See Chen & Ringel, 2001; Hernandez, et al., 2004; Martí Parreño, 2005; Selva Ruiz, 2009; Theodorou & Sirmakessis, 2009; Wise, et al., 2008.

narrow interactivity, manipulation of information, complex automated systems and networked communication (2004, pp. 87-89).

Three of the special qualities of digital games proposed by Salen and Zimmerman overlap with the four essential properties of digital environments identified by Janet Murray in her book *Hamlet on the Holodeck* (1997). Murray asserts that digital environments are procedural, which is related to their nature as complex automated systems; participatory, which is related to their nature as interactive systems; encyclopedic, which is related to their capacity to hold and manipulate information; and spatial, which is related to their power to represent spaces through which players can navigate (1997, p. 71).

Since the nature of advergames is digital, it can be concluded that advergames also feature these mentioned traits. Thus, as digital games, advergames are procedural, spatial, interactive, encyclopedic, and networked environments. The following five sections are focused on describing how these properties can be exploited to convey advertising messages.

Advergames as Procedural Environments

Murray uses the term procedural to refer to digital environments' "defining ability to execute a series of rules" (1997, p. 71). She explains that in the same way that "drama allows us to explore action, simulation narrative can allow us to explore processes"[26] (1997, p. 181). As procedural environments, digital games can embody and execute processes and allow players to collaborate in the performance. Hence, players can "enact, modify, control and understand processes within advergames in a very different manner [than] they do in other media" (1997, p. 181).

In his influential book *Persuasive Games: The Expressive Power of Videogames*, Ian Bogost claims that procedural expression implies the creation of a symbolic system that governs human thought or action (2007, p. 5). He understands that while not all procedures are expressive, processes that might appear unexpressive may, actually, entail a higher order of expression that comes from symbol manipulation. Therefore, Bogost defines procedurality as a "way of

[26] Processes are understood as the "methods, techniques and logics that drive the operation of systems" (Bogost, 2007, p. 2).

creating, explaining or understanding processes" (2007, p. 2). The author defines the term 'procedural rhetoric' to designate the practice of conveying arguments through processes. Those arguments are made through the manipulation of rules of behavior that in digital games are 'authored' in the code (2007, p. 29). Therefore, advergames can make use of the procedural nature of digital games to embed persuasive arguments within the rules of the game.[27]

In addition, the presence of a system of rules within digital games is sometimes undetectable because digital environments do not readily reveal their internal workings. The rules authored in the code that makes games work in a specific manner are usually not available to the player (Salen & Zimmerman, 2004, p. 88). This capacity of digital games to obscure the system can be useful in advergames to overcome players' resistance to persuasion. If players are not aware of the presence of a system of rules within the game, they are not going to be aware of the arguments made through the manipulation of those rules. Because of the procedural nature of digital games, players feel that they are inducing the behavior of the system by their performance (Murray, 1997, p. 74). In other words, players feel in control of the situation, which may cause them to let their guard down against possible persuasion.

Furthermore, digital games have the potential to automate complicated processes, which facilitates the design of complex games that "that would be too complicated in a non-computerized context" (Salen & Zimmerman, 2004, p. 88). This potential facilitates the conveying of complex messages through the manipulation of the rules of complicated processes that involve several dynamic variables.

In addition, the rules of digital games usually cannot be discussed and changed during play (Sicart, 2009, p. 27). Unlike analog games, in which players commonly discuss, negotiate and change rules, in digital games rules are non-negotiable during play because they are authored in the code, which is not accessible to players. Thus, the manipulation of rules with persuasive intentions is more easily accomplished within digital games, whose rules cannot be changed by players.

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[27] Bogost's statements on procedural rhetoric deserve special attention, and I will return to them in the next chapter.

An example of how advergames can make use of procedural rhetoric to convey advertising messages is *Hit it Pure* (Hello Design, 2009), an online game that allows players to hit pure shots with two Callaway Golf drivers, the FT-iQ and the FT-9. The game was designed in a realistic physical setting to let the player experience the precision of these models. The physical settings of the game give players a realistic simulation of the behavior of a golf ball in real life, which makes them aware of the benefits of the drivers without the need for complex explanatory texts.

To sum up, the procedural nature of digital games can be used in advergames to convey complex messages through the manipulation of the rules of complicated processes. Furthermore, because the rules authored in the code of advergames are usually not available to players, they are not going to be aware of the arguments made through the manipulation of those rules. This lack of awareness may overcome players' resistance to advertising messages. Moreover, the capacity of digital games to obscure the system prevents players from discussing, negotiating or changing the authored rules.

Advergames as Spatial Environments

Digital games are also characterized by their power to simulate spaces through which players can navigate (see Aarseth, 2001; Murray, 1997, p. 79). Henry Jenkins gives special relevance to this property of digital games in his article *Game Design as Narrative Architecture,* where he describes game designers as architects who design worlds and sculpt unique spaces that can be explored, mapped and controlled by players (2004, p. 13).

Furthermore, in the same way that the expressive capacity of procedurality is unique to digital games, so is the expressive capacity of spatial design. Game space embodies a ruleset capable of structuring the play in a way in which the geographic layout, the architecture and mise-en-scène become expressive (Ferrari, 2010, p. 2). All the space elements of advergames can be designed with a persuasive intention. Moreover, the possibilities provided to players to navigate through the space can also be designed to be expressive themselves.

However, there appears to be a preponderance of advergames which minimize spaces that can be 'freely' explored by the player, such as mazes and arenas, and instead opt for track-spatial structures, such as

sidescrollers, racing games, rail shooters, and corridor shooters that guide the player's performance within the game (Ferrari, 2010, p. 30). In this style of game structure, even if the diegetic space seems to continue outward and away from the track, the player is not able to explore it.

However, limiting the player's freedom in order to ensure persuasive effectiveness shows no respect for the specificities of the medium. Providing freedom of movement to players makes them feel in control of the situation, which makes them let their guard down against persuasion, an effect that can be useful in advergames to overcome players' resistance to advertising messages. Moreover, it can also be used as a strategy to increase the retention of players, who can be motivated to return to the game to explore the uncharted territory.

An example of the latter is the advergame *OCB Blackthinking* (Medusateam, Inocua the Sign, Physalia, & Nitsnets, 2010). This advergame was part of a viral campaign aimed at promoting a special edition of OCB rolling paper that used the blackthinking movement born in 2007. The blackthinking movement was based on independent thought, and its leitmotiv could be summed up as 'do what you think, don't think what you do'. The game starts with the following sentences, encouraging the player to feel free and to be creative: "Welcome to a place where you are not allowed not to think. Not allowed not to imagine. Not allowed not to create. Not allowed not to decide. Welcome to a place where ideas take on a life of their own". The space of this advergame is a village that can be explored by the players, where they are able to face challenges, interact with characters and create their own designs. This space design is very much in tune with the communication concept of the advertising campaign, which aims at individual creativity, ingenuity and imagination. Thus, the possibility to freely explore the game space becomes meaningful itself.

In conclusion, not only can all spatial elements of advergames be designed to persuade players, but the way players can explore the space can also be designed to be expressive. Moreover, providing freedom of movement to players can be useful in overcoming players' resistance to advertising messages and to increase retention.

Advergames as Interactive Environments

Digital games are capable of representing not only visual spaces that can be explored by the player but also abstract environments that are discovered "by the interactive process of navigation" (Murray, 1997, p. 80). The interactive property of digital games facilitates the design of environments that support actions and return outcomes from players' choices. A designed interaction, with an internal structure and context, provides meaning to the actions taken by players (Salen & Zimmerman, 2004, pp. 58-69). Therefore, designed interaction can be used with persuasive intentions within advergames. This type of interactivity was identified by Salen and Zimmerman as 'explicit interactivity', which implies "interaction in the obvious sense of the word" (2004, p. 60). However, the authors identify three other modes of interactivity that should be taken into consideration when designing advergames: cognitive interactivity, functional interactivity and beyond-the-object-interactivity (2004, pp. 59-60). An advergame's designer can work with the four modes of interactivity to assign brand-related meaning to the actions taken by the player. This can be a powerful way to convey advertising messages through advergames.

Cognitive interactivity is the "psychological, emotional and intellectual participation between a person and a system" (Salen & Zimmerman, 2004, p. 59). This mode of interactivity cannot be designed, but it can be triggered by the whole advergame experience. For instance, a game design can generate complex imaginative participation. The psychological, emotional and intellectual responses elicited by the advergame can be linked to the advertising message and can encourage players to establish connections between what they experience and the brand.

Functional interactivity is determined by the "structural interactions with the material components of the system" (Salen & Zimmerman, 2004, p. 59). This type of interactivity is defined in advergames by the design of the interface. The possibilities provided to the players to interact with the system are structurally provided by the interface. The response of the interface to specific actions of the player and even its visual presentation can be designed to become meaningful.

Finally, beyond-the-object interactivity is the "interaction outside the experience of a single designed system" (Salen & Zimmerman, 2004, p. 60). Again, this mode of interactivity cannot be designed by the

advertiser but can be triggered by the advergame design. Beyond-the-object interactivity can be useful to spread the advertising message. The way players share their experiences with other people can be facilitated by the system through the introduction of social interactive features, which will be explained in detail below (see p. 35 of this thesis). However, the impressions that players share about the advergame or the advertising message cannot be controlled by the advertiser and will depend on the unique experience of each player.

Due to the interactive nature of advergames, players adopt an active stance towards them that differs from the passive attitude of traditional media audiences. Whereas the majority of advertising forms are interruptive, advergames are a marketing strategy that operates on pull, which means that it is the player who voluntarily approaches the advertising message. Thus, "advergames are one of the few examples where brands can successfully entice consumers to play with advertising messages" (Kempt, 2009, p. 25). Furthermore, advergames have the potential to allow the player to interact with the advertised product in its natural environment. That interactivity occurs in terms of immediacy, but at the same time it is also confined by the narrow specification of the digital device on which the game is being played.

A good example of the latter is *FMX* (Valentin & Byhr, Normal Inc., & Lucky Punk, 2010), an advergame launched to present a new truck model for the construction sector from Volvo. The game is designed as a realistic driving test experience in which the player is challenged to confront difficult situations that drivers encounter in the physical world, such as climbing a steep hill. A special feature of the truck, which serves to overcome the difficulties, is presented in each challenge. In the case of the steep hill the game shows the player how to use the i-Shift control to let the truck handle the downshift. In this advergame the players have the opportunity to interact with the truck in a space that simulates its natural environment. However, this experience is confined within the possibilities of the computer device, so players have to control the truck using their keyboards and not the wheel, the pedals and the gearshift. Therefore, they can get some information by interacting with the truck in the advergame, but there is some valuable information that cannot be conveyed through interactivity because of the limitations of the digital device.

To sum up, explicit and functional interactivity can be designed within advergames to provide meaningful experiences. Furthermore, the complete experience can trigger psychological, emotional and intellectual responses in players that can be linked to the advertising message. Moreover, the system can incorporate social features to allow players to share their experiences with other people, which can help to spread the advertising message. However, although interactivity can be designed and/or triggered by the game design, players' performance will determine the way they experience the game.

Advergames as Encyclopedic Environments

As digital games, advergames also have the potential to contain large amounts of information encyclopedically that can be selectively revealed at appropriate moments during play (Salen & Zimmerman, 2004, p. 88). This trait makes advergames a unique medium to convey complex advertising messages without triggering players' resistance.

Advergames are useful to convey complex messages because of their capacity to store large amounts of data in different forms, such as text, video, audio, images or 3D animations. In fact, every aspect of an advergame's program can be regarded as information, such as the mechanisms for handling players' interactivity (Salen & Zimmerman, 2004, p. 88). All this data can be designed to convey a complex advertising message that takes advantage of the communication potentialities of the different formats of stored information.

Moreover, advergames can avoid players' resistance to such complex advertising messages by selectively revealing information during play. As complex automated systems, advergames can hide information from players and then reveal it at particular moments of the game session, depending on players' performance. This property also allows advergames to convey customized messages, revealing different information depending on players' performance.

An example of how advergames can store large amounts of information and reveal it selectively during play can be seen in *Get the Glass!* (North Kingdom, 2007), an advergame developed for the Milk Processor Board of California. The communication concept of the game is focused on the idea that milk consumption brings physical and psychological benefits that impact positively on players' health and social lives.

The communication concept of *Get the Glass!* (North Kingdom, 2007) is presented in the story of the game, whose protagonists are four members of a family, the Adachis. The Adachi family is chased by the police after several attempts to steal a big glass of milk that is protected inside a fort. The goal of the family is to get this big glass of milk because without milk they are suffering physical and psychological problems. Each of the four members of the family has a personal story concerning the physical and psychological problems caused by the lack of milk consumption.

In the game, many audiovisual elements contain information that complement the message presented by the story. The most remarkable thing is the audiovisual treatment of the object of desire of the family, the glass of milk. The player can also find other visual elements that hold valuable information connected to the advertising message, such as X-rays that show the weakened bones of the father or the son's decayed teeth caused by the lack of milk consumption.

Furthermore, the mechanics of the game also contain information related to the communication message. In one of the challenges, for instance, the information is held in the mechanism that handles players' interactivity. The objective of players is to help the father drive a van along a winding road. In this case, the system responds to players' performance in an unexpected way, making it difficult for them to control the van. The argument conveyed through this interactive process is that it is difficult for the father to control the van because his muscles are weakened and he does not have enough strength to control it properly as a consequence of low milk consumption. In addition, there is also a lot of textual information present in the game that contains in-depth information about the benefits of milk consumption, such as the family members' criminal files or instructional texts of the challenges and fortune cards. All of these texts contain arguments that reinforce the advertising message.

Therefore, *Get the Glass!* (North Kingdom, 2007) contains an amount of information about the benefits of milk consumption that is unimaginable in advertisements in any other media. The information is also selectively revealed within the game and only those players who are really interested in detailed information obtain it, which helps to overcome resistance.

In conclusion, the ability of advergames to contain large amounts of information encyclopedically allows them to convey complex advertising messages by storing information in different formats within the game. Furthermore, this information can be selectively revealed to players, which can be helpful to brands to convey customized messages to consumers.

Advergames as Networked Environments

As networked environments, digital games can ease communication among players and between players and game designers. What make digital games different from other kinds of games is that this communication can be established over long distances and participants can share a range of social spaces (Salen & Zimmerman, 2004, p. 89). This communication, I claim, can be voluntarily or subconsciously established and consciously or subconsciously perceived.

In advergames, game designers can consciously manipulate game elements to convey an advertising message that can be consciously or subconsciously perceived by players. On the other hand, players can voluntarily or subconsciously communicate with brands during game play, which can provide the latter with relevant information on consumers' preferences and needs. In addition, players can establish communication with other players with whom they can voluntarily or subconsciously spread the advertising message.

Communication among players and brands within advergames can be established in many forms. Brands can communicate with players manipulating all the elements of the game design with the purpose of conveying an advertising message. Players can communicate with other players during the game session through chats, social media features, real-time audio or video or in-game interaction, for example. Furthermore, players can voluntarily or unwittingly communicate with brands during the game session through social features, registration forms, contact forms, email, chat or even through their own performance in the game. Thus, networked communication is a powerful property of advergames to increase player acquisition, retention and virality, three terms directly related to advergames' effectiveness.

Player acquisition techniques are focused on attracting new players to the advergame. The best practices are those that help to increase

participation rates and minimize acquisition costs. As participatory environments, digital games are able to integrate directly into the gameplay player acquisition techniques, such as friend invitations and game mechanics that require contributions of friends to succeed. These strategies also permit an increase in player virality, the degree to which one player invites other players into the game. These practices provide powerful benefits when they are deeply integrated into the game experience. Furthermore, player retention techniques have the aim of extending the loyalty and lifetime value of players. The integration of social challenges and competitions within advergames are strategies that take advantage of participatory features of games to increase acquisition rates (Whitehead, 2011, p. 1).

Examples of how social features can be used within advergames to increase player acquisition, retention and virality can be found in the advergame *Pleasure Hunt 2* (Lowe Brindfords, B-Reel, & Plan8, 2012). The advergame is a race across the Internet launched by the ice cream brand Magnum. In the game, players are invited to collect chocolate pieces of Magnum across New York, Paris, and Rio de Janeiro. The game uses Bing's streetview-like interface to provide the backdrop. After the experience, the players are invited to share the game with their friends and acquaintances on Facebook and Twitter. By June 2012 more than 3.8 millions of users had already "liked" the game on Facebook, evidence that players are in fact sharing their experiences with others. Moreover, the game also enables players to create a challenge on Facebook inviting some friends to join it. In creating the challenge players give Magnum's Facebook application access to their social profile, providing the brand with better knowledge of consumers' profiles, preferences and needs.

To sum up, as networked environments, advergames can ease communication among players and between players and advertisers. This communication can be voluntarily or subconsciously established and consciously or subconsciously perceived, and it is a powerful property of advergames to increase player acquisition, retention and virality, three terms directly related to advergames' effectiveness.

After a detailed analysis of the properties of digital games that differentiate them from other kind of games, it can be concluded that acknowledging the properties of advergames can be useful in

understanding how they can be exploited to convey meaningful experiences. Now that the digital nature of advergames has been established, I will continue the discussion of the definition of advergames proposed above by explaining what differentiates them from other type of strategies.

An Advergame is Specifically Designed for a Brand

In the definition I propose above (see p. 25) I specify that advergames are specifically designed for a brand. This stipulation, which has not been included in most of the definitions reviewed above, is of particular relevance because it serves to differentiate advergames from commercial digital games in which advertising techniques are used to promote products or services. This means that advergames are designed for brands that need to convey an advertising message, which implies that the whole experience is conceived with that purpose. Commercial digital games have a purpose that is different from advertising, most likely entertainment, but they resort to advertising as a source of revenue and, in certain genres, as a way of enhancing the realism of the game.[28] In-game advertising and product placement are the most common techniques to advertise products and services in commercial digital games.

Chang, Yan, Zhang, & Luo, who studied the effects of in-game advertising, define the concept as "the placement of brands in games usually in the form of billboards, posters, or sponsor signage in sports and racing games" (2010, p. 63). However, the potential of this strategy grows and changes as quickly as new technologies do. Thus, ads can appear in digital games in every imaginable way and not just in the form of billboards, posters, or sponsor signage, as Chang et al. state, but also as dynamic streaming content or real-time viral messaging, for instance. An example of the potential of the technologies used to integrate ads in digital games is the advertising system Spyware,[29] incorporated in *Battlefield 2142* (Electronic Arts, 2006), which is able to selectively deliver ads by region.

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[28] Nelson has demonstrated that when advertisements are placed in scenes that match the physical world, they help to enhance the game experience (see 2002, p. 88).

[29] This advertising system uses a player's IP address to determine the region of the player, enabling the advertiser to deliver appropriate ads by region and language.

The concept of in-game advertising should not be confused with the strategy of product placement in games, even though the boundaries between the two can sometimes be difficult to distinguish. I would argue that the term "in-game advertising" can be replaced by "in-game ad-placement" in comparison to "in-game product placement" to clarify that the former refers to the strategy of placing ads in games while the latter refers to the strategy of placing products in games. Product placement in digital games is an attractive strategy because it gives the players the opportunity to interact with a product in its natural environments and implies endorsement when an actor or character uses the product (Kuhn, Love, & Pope, 2004, p. 1). Nike shoes, for example, were integrated into *NBA 2K6* (2K Sports, 2005), released for the PlayStation 2 and Xbox. In standard gameplay mode, over two hundred athletes wear Nike shoes, which they normally use on the court in the physical world. The game also integrates Nike's online shoe customization software, which enables players to design and personalize shoes that can be worn by players in the game.

The combination of in-game advertising and product placement techniques within commercial digital games can result in unique branded experiences. An illustrative example of this is the location-based special edition of *Angry Birds* which came about through the collaboration between Rovio and McDonald's in China in 2012. In this special edition, *Angry Birds'* gamers playing in McDonald's restaurants in China were able to unlock a variety of content, such as game modes, stages and power-ups, depending on which McDonald's outlet they were visiting.

However, no matter how well integrated a brand is in a commercial digital game, it will always be an outsider in an experience which was designed for other purposes. Advergames, on the contrary, are branded games specifically designed to accomplish an advertising purpose. Consequently their content is fully controlled by the advertiser, which means that the entire experience is designed to embody the advertising message. Again, in-game advertising and product placement are common techniques that are used within advergames to achieve the advertising goals. Yet in advergames marketers can also persuade players by manipulating other game elements, such as the story, the characters or the rules. The fourth and fifth chapters focus on understanding which

elements of digital games can be designed to convey advertising messages and what techniques can be used for that purpose.

An Advergame Aims to Convey an Advertising Message

Up to this point I have argued that an advergame is a digital game specifically designed for a brand and that the purpose of the advergame is to convey an advertising message (see p. 25). Thus, a digital game is understood here as the medium selected by a brand to convey an advertising message in the communication process it establishes with its customers.

I have assumed that as digital games, advergames are participatory environments (see p. 31). That means that the communication process that the brand establishes with its clients is not a one-directional communication process as in traditional media in which the brand is the sender and a group of consumers are the receivers. In advergames the communication process is bidirectional, and its final result depends not only on players' choices on designed interaction but also on their personal way of interacting with the environment, the decisions they take that are not part of the designed interaction. Therefore, the interactive nature of digital games makes players co-authors of the advertising discourse. When playing the advergame, players interpret an unrepeatable message that is the result of their performance during the game experience.

In this communication process, there are at least three actors that have to be taken into consideration: the brand, which wants to convey an advertising message; the game, that is the medium selected to convey the message; and the player, who is the target of the advertising message (see Figure 1). Between these three actors relationships are set up that need to be considered to understand how this communication process works. First of all, there is a relationship between the brand and the player: the brand wants to convey an advertising message to the player by making use of an interactive medium, which results in the player's interpretation of the advertising message. Secondly, there is a relationship between the brand and the game: in order to convey the advertising message the brand needs to properly embed it within the game, which results in a branded experience. And finally, there is a relationship between the player and the game: the player makes his own choices within the game, which results in an unrepeatable player's

performance. Thus, the players' interpretation of the advertising message depends not only on their personal performances within the game but also on the way the advertising message is integrated within the branded experience.

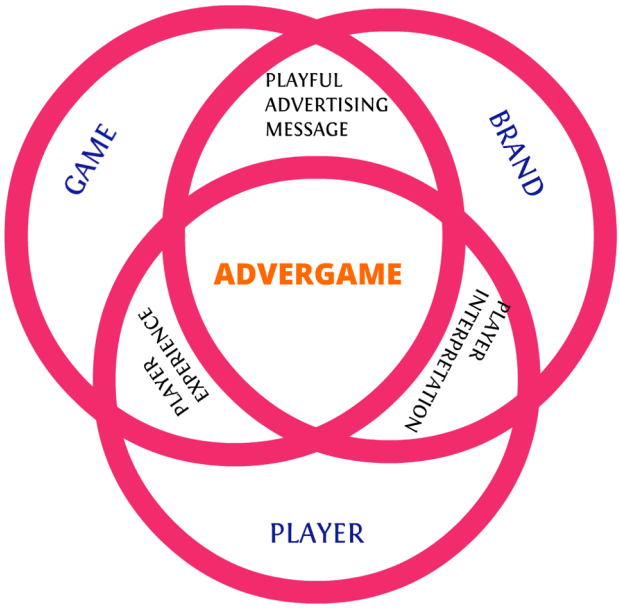


Figure 1. Relationships between advergame's actors. Source: author's design.

Above I have reviewed the properties of digital games that make them unique and have explained how these properties can be used to convey advertising messages through advergames: interactivity, manipulation of information, networked communication, procedurality and spatiality. I concluded that every single element of advergames can be designed by the brand for the purpose of conveying an advertising message. Therefore, it is important to understand those elements and how they can be utilized with persuasive intentions in order to appreciate the potential of digital games as advertising media.

In conclusion, in order to understand how digital games can convey advertising messages, it is necessary to take into consideration that digital games are the medium selected by the brand to convey the advertising message. Furthermore, it is important to take into account

that a bi-directional communication process is established in which the brand, the game and the player establish relationships.

1.2. Advergames' History

Now that the term 'advergame' has been defined, the next step in understanding how digital games can be crafted to convey advertising messages is to undertake an analytical review of the evolution of this practice throughout history. This exploration is done in order to demonstrate that although technology has significantly progressed since the inception of advergames, the ways in which digital games have been used to convey advertising messages have not evolved as quickly and in some sense remain mired in the past. I claim that this stagnation might be caused by a lack of understanding of the medium.

Advergames' precedents and evolution in history are an unexplored topic. Ilya Vedrashko wrote the only text that I have found on this subject as part of his Master's Thesis *Advertising in Computer Games* (2006a). Finally the author decided not to include the chapter in his dissertation, and the text remains unpublished. This section gathers the information collected by Vedrashko and enhances and updates it with new data.

1.2.1 Advergames' Precedents

Although the term advergame was coined in 2000 by Giallourakis (Buckleitner, 2008, p. 46), the origin of this marketing strategy dates back to the early 1980s, and it is even possible to find some precedents from the 1930s. The first precedent I have found is a paper game from Planters peanuts published on the cover of the April 5, 1930 issue of the American magazine *Saturday Evening Post*. *Planters* (Party Virginia, 1930) is a roll-and-move game featuring Mr. Peanut, the famous mascot of the brand. The game also shows two bags of Planters Pennant salty peanuts.

Another early precedent found by Vedrashko is *Mustang* (Chicago Coin, 1983), a pinball machine launched by Chicago Coin in 1964, which included images of the Ford model. Vedrashko explains that it is not clear whether Ford just authorized the image or paid for the image

to appear, but the sports car Mustang present in the game did come out in April that year (2006b, p. 5).

The second example unearthed by Vedrashko is *Lunar Lander* (Burness, 1969), a game with multiple versions, which was first launched in 1969 (Vedrashko, 2006b, p. 6). The goal of this game was to portion a limited amount of fuel to land on the moon without crashing. In one of the later versions from 1972, a specific landing site offered was a McDonald's restaurant. Upon landing successfully near the restaurant, an astronaut would walk over to get lunch. Crashing into the restaurant destroyed it permanently (until the program was reloaded) and displayed an amusingly sarcastic message berating the player: "Boy, are you inept!" This inclusion was just a joke from an anonymous designer, and not a paid-for inclusion by McDonald's, but it is probably one of the first examples of in-game brand integration.

In his book *Persuasive Games: The Expressive Power of Videogames* (2007), Ian Bogost refers to *Datsun 280 Zzzap* (Midway, 1976) as the earliest digital game "with authorized branding in support of a product" (2007, p. 200). Obviously inspired by Atari's *Night Driver* (Atari, 1976), the game was a driving simulation in which nothing but the name was tied to the vehicle.

From the analysis of these four early precedents we can see that from the inception of this practice brands have been embedded within games in a variety of ways. Whereas in the *Datsun 280 Zzzap* (Midway, 1976) the brand was present only in the name of the game, Ford and Planters showed images of their products in *Mustang* (Chicago Coin, 1983) and *Planters* (Party Virginia, 1930) respectively. Furthermore, Planters' game also features the brand's famous mascot. However, in *Lunar Lander* (Burness, 1969) the designer opts for a deeper intrusion of the brand into the gameplay, in which a McDonald's restaurant becomes part of the game space as one of the landing sites of the game. Moreover, McDonalds' products become a reward in the game since an astronaut would walk over the restaurant to get lunch upon landing successfully.

Nevertheless, the Planters and Ford examples cannot be considered advergames due to their non-digital nature. The McDonald's game can also not be considered an advergame because the brand did not authorize its appearance. And in the case of *Datsun 280 Zzzap* (Midway, 1976), it is also unclear whether it is an advergame or a branded game.

Let us proceed with the analysis of early advergames to gain more insight into the evolution of this practice.

1.2.2. The Earliest Advergames

Brands themselves started developing promotional digital games in 1983. It was a moment of growth after the first crisis of the video games industry in 1977. The Japanese Invasion from 1978 brought not only technical but also content-related innovations. *Space Invaders* (Taito, 1978) and *Pac-Man* (Namco, 1980) were some of the successful titles arriving from Japan at that time (Malliet & de Meyer, 2005, pp. 28-29). And it was also a Japanese designer who then introduced one of the most important figures of the history of computer games, Mario, initially called Jumpman in his first appearance in *Donkey Kong* (Shigeru Miyamoto, 1981).

The early examples of advergames used to be simple games that were sent to players for free via direct mail following a request. The first of this kind of game was *Tooth Protectors* (Johnson & Johnson, 1983), an advergame released to promote Johnson & Johnson hygiene products (Bogost, 2007, p. 201). In the game the player was responsible for controlling T.P. (the Tooth Protector) to secure a row of teeth against a bacterial attack performed by a 'snack attacker'. If the player failed, and a pellet reached a tooth, it would start flashing indicating possible decay. In order to prevent the disaster, the player had to press the joystick button, initializing teeth cleaning, including brushing, flossing and mouthwash. That was the moment in which the products of Johnson & Johnson came into play. The gamer had to do his best to protect the teeth from the snack attacker because the cleaning process could be deployed only three times in each level.

Tooth Protectors (Johnson & Johnson, 1983) makes use of game mechanics to convey a message about the importance of maintaining good oral hygiene. The goal is to boost dental care among players and make them link that habit to Johnson & Johnson products. However, the game doesn't provide arguments to choose Johnson & Johnson's products over other brands. However, in order to get the Atari game, it was necessary to collect proof-of-purchase symbols from Johnson & Johnson's products and mail them to UPC. Thus, it can be assumed

that game's target audience were Johnson & Johnson's consumers and the objective of the campaign was to increase loyalty and revenue.

In the same year Ralston Purina, a pet food company, used a famous mascot from its TV adverts as the main character in the game *Chase the Chuck Wagon* (Spectravision, 1983) which was developed for the Atari 2600 (Vedrashko, 2006b, p. 6). The goal of the player was to guide a dog out of a maze, where it would find the Purina Chuck Wagon. Whereas the game mechanics are slightly related to the communication message —helping the dog to find the Purina Chuck Wagon may imply that dogs like Purina food and are looking for it , the remarkable thing about this advergame is the incorporation of the mascot. However, the Purina's mascot is in this case a passive character, which is only waiting for the dog controlled by the player to arrive.

Another game based upon a television commercial character was *Kool-Aid Man* (Atari, 1983). Kool-Aid Man is the mascot of Kool-Aid, a brand of a flavored drink mix (Méndiz Noguero, 2010, p. 48). The character is a gigantic pitcher with a smiley face, filled with the red drink. The objective of the game is to help Kool-Aid Man to save a pool whose water is being drunk by the 'thirsties', who are the enemies in the game. The player controls Kool-Aid and his mission is to quench the 'thirsties' while they are drinking the water from the pool — the moment in which they are vulnerable— and save the pool. What is innovative is the use of the commercial character as the main character of the game. However, the poor graphics of the game hinder the recognition of the mascot and even the storyline. Players understand the story and recognize the mascot only if they read the manual that accompanies the game.

Furthermore, in 1983 Coca-Cola published a very limited edition of *Pepsi Invaders* (Atari), which was given away to the 125 sales executives attending the brand's annual convention (Vedrashko, 2006b, p. 6). The game is a remake of the original *Space Invaders* (Taito, 1978) in which each row of six aliens was replaced by the letters 'P E P S I' followed by one alien. In addition, the game includes a special enemy in the form of a Pepsi logo that sometimes flies through the top of the screen. If the player hits the Pepsi logo he receives bonus points. This game is a playful metaphor on the commercial battle between Pepsi and Coca-Cola, in which Pepsi is represented as the enemy. This metaphor is reinforced with a message visible at the beginning of the game: 'Coke

Wins'. It is important to point out that the targets of this advergame were not Coca-Cola consumers but the brand's executives. Therefore, the aim of the brand in creating the game was to appeal to its executives' competitive spirit.

At that moment marketers were also attracted by the arcade industry. *Pac-Man* (Namco, 1980), using a feel-good atmosphere, was "the first game that managed to draw the female population into arcades" (Malliet & de Meyer, 2005, p. 29) and was able to collect four billion quarters in its first fifteen months of existence. Midway took advantage of this popularity by releasing a peculiar sequel under the name *Pac-Man Plus* (Midway, 1982). In this sequel one of the power-up fruits was replaced with a red can that looked suspiciously like a can of Coca-Cola, with the trademark wave on it (Vedrashko, 2006b, p. 7), one of the first strong examples of product placement in digital games.

The trend to integrate brands into popular video games came to a halt with the so-called Video Game Crash of 1983. In 1982, when the industry was at its peak of popularity and profitability, and able to bring in $3 billion worth of games in one year, many companies rushed to open video games divisions to capitalize on the tidal wave. They flooded the market with poor quality games, resulting in sales dropping to $2 billion in 1983, $800 million in 1984 and $100 million in 1985 (Malliet & de Meyer, 2005, p. 34).

From the analysis of the most salient advergames at this stage of advergames' history, I can conclude that companies were using different and innovative techniques to embed their brands, products and advertising messages within digital games. Moreover, at least in the examples analyzed here, it seems that there was a concern about choosing game concepts that helped to convey the advertising message or at least that facilitated the integration of the brand or the product advertised.

1.2.3. Innovations in the Industry

Console Advergames

After the Crash of 1983, companies understood that they needed to focus on developing more attractive games, with improved content and graphics. This new phase opened new possibilities for brand integration within video games, but in fact the titles from the immediate post-crash

period were ad-free (Malliet & de Meyer, 2005, p. 34). It took until 1986 for the industry to stabilize again, and Nintendo became the market leader. The release of *Mario Bros* (Shigeru Miyamoto, 1983) introduced Nintendo's figurehead, Mario, who soon became the main character of one of "the most essential platform games ever" (2005, p. 35), *Super Mario Bros* (Shigeru Miyamoto, 1985). The arrival of the Nintendo NES accompanied by the game in 1986 managed to revive the industry. And finally, the increasing reach of Nintendo's console rekindled advertisers' interest in the medium.

At that time advergame's return was marked by initiatives such as *The Ford Simulator* (The Ford Motor Company, 1987), a first-person driving advergame for DOS that includes detailed information on Ford's 1987 model line, a buyer's guide and an order form (Méndiz Noguero, 2010, p. 49). The game allows the user to drive any of the sixteen 1987 models and to choose between four test tracks in which different features of the cars are illustrated. After each of the test tracks the simulator includes an interactive info-center that contains technical information related to the features tested on each of the tracks, such as the aerodynamics, the fuel injection, the suspension or the air-bag system. This simulator is of special interest in the history of advergames because it shows an interactive and playful way to present a large amount of encyclopedic information about a product, making use of the combination of multiple techniques that can be used within a digital game.

From that moment, more advertisers took the initiative and started releasing games under their brands. Some of them, such as *Pepsi Challenge* (Topo Soft, 1988), were just variations of popular games but featuring a brand logo. But progressively other advertisers bet on more original ideas, which integrated the advertised product in different ways into the gameplay and demonstrated new ways of brand-integration. An example of this is *Avoid the Noid* (ShareData, 1989), released by Domino's Pizza, in which the main character is a pizza delivery boy who has to avoid a pizza-destroying Noid. A similar strategy was followed by *The California Raisins* (Box Office, 1988), in which the player controls one of the members of a fictional music band, present in other advertising campaigns of the brand, trying to rescue his colleagues captured in a cereal factory (Vedrashko, 2006b, p. 11).

Soon Nintendo's *Super Mario* influence became apparent, and many platform console advergames started showing up in the early 1990s (Vedrashko, 2006b, p. 12). *M.C.Kids* (Virgin Games, 1992), available for the Nintendo NES, was a quest to find Ronald McDonald's bag of magic bricks stolen by Hamburglar, the villain of the game. The game features two children that venture into the McDonald's fantasy world McDonaldland and have to go through seven different worlds. Golden arches in the shape of McDonald's 'M' can be collected for extra points and can unlock bonus rounds. The gameplay presented obvious similarities with *Super Mario*'s gameplay.

Cool Spot (Virgin Interactive, 1993), a game featuring 7up's mascot Spot as its main character, was launched on the Mega Drive, Sega's answer to the Nintendo Entertainment System (Vedrashko, 2006b, p. 12). In this platform game, the player controls Cool Spot, who can attack by firing soda bubbles. In each level the player must collect spots in order to rescue other Cool Spots in a game mechanics that again resembles *Super Mario* or *Sonic*. In the bonus stages, it is also possible to collect hidden letters that when combined spell "UNCOLA", 7up's slogan.

Nintendo's reaction to the Mega Drive came with its new model Super NES launched in 1990 (Malliet & de Meyer, 2005, p. 35). A prominent platform advergame launched for this console and for its rival Mega Drive was *Chester Cheetah: Too Cool to Fool* (Kaneko, 1992) with Frito-Lay's Chester Cheetah as the protagonist and Cheetos' snacks as collectible items (Vedrashko, 2006b, p. 12). The game presents, once again, obvious similarities with *Super Mario*'s gameplay.

This review of the console advergames from the 1990s discloses that it was not an innovative period for marketing strategies. Most of the advergames designed during this stage were games inspired by successful commercial games, which featured brands' mascots as main characters and brands' products as collectible items. However, during the 1990s, an important shift occurred in marketers' attitude towards games, and they started to see them as a viable advertising medium in their own right. A consequence of this was the emergence of new companies exclusively dedicated to advergame development. BrandGames, established in New York in 1995, claimed to be "the first company to specialize in leveraging computer game technology in business

communications" (1995), and they worked for many powerful clients such as Coca-Cola, General Mills, Taco Bell, GAP and Reebok.

Online Advergames

In parallel to the console and computer games' evolution, another phenomenon marked the game industry: the popularization of casual games. Casual games are defined in the *Casual Games Association 2007 Market Report* as "video games developed for the mass consumer, even those who would not normally regard themselves as a 'gamer'", and are characterized as being "fun, quick to access, easy to learn and requiring no previous special video game skills, expertise or regular time commitment to play " (2007, p. 3; cf. Juul, 2010).

The evolution of casual games is connected with the emergence of Internet technologies such as Flash and Java, which triggered a high increase in Internet use in the 1990s (Woolley, 1994). The development of new technologies enabled digital games to be played online, providing a new platform for casual and networked games. At that time, the ease of online distribution, combined with the uncomplicated gameplay of casual games, started to attract non-traditional gaming audiences to digital games, giving rise to what Jesper Juul has dubbed the Casual Revolution, "a breakthrough moment in the history of video games" (2010, p. 2). The author defines this revolution as a process in which digital games have become normal for three reasons: casual games do not ask players to readjust their schedules, they do not require players to spend hours to get somewhere in a game, and they "fit the social contexts in which people are already spending their time" (2010, p. 1).[30] In order to define players' experience Juul refers to the concept of 'pull' as a feeling of "looking at a game and wanting to play it" (2010, p. 2). In digital games, this feeling comes when the player can see what has to be done in the game; can understand, more and less, how to do it; and wants to do it. Juul states that casual games solved a

[30] 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).

problem related to the missing 'pull' by fitting game sessions into people's lives.

Online games provide a series of advantages to advertising media compared with computer or console games. Being available online, advergames don't have geographical or time limitations, this means that they are available 24/7 worldwide and practically anyone with an Internet connection can access them. Therefore, these initiatives can aspire to reach broader audiences. Furthermore, their presence online makes them networked environments, which, as previously explained (see p. 35 of this thesis), is a powerful property to increase player acquisition, retention and virality, three terms directly related to advergames' effectiveness.

Furthermore, if framed as casual games, advergames can claim a series of traits associated with the former: "emotionally positive fictions", "usable design", "interruptibility", "juiciness" and "lenient punishments" (Juul, 2010, p. 50). These traits described by Juul to explain how casual games are able to attract non-traditional gaming audiences can be useful for advergames, which can employ them to aim at diverse target audiences.

Advergames can be emotionally positive fictions designed to associate the game with positive emotions and be perceived as pleasant and attractive environments (2010, p. 31). In addition, advergames can enable usable designs that do not require previous knowledge of digital game conventions, which will help users to rapidly understand how to play them (2010, p. 33). Furthermore, advergames can be designed to be played for short periods of time or in brief bursts, which will facilitate access for busy players by providing flexibility in the time invested in the game session (2010, p. 36).

Another component of casual game design that can be used in advergames is the balance between high difficulty and lenient punishment. Advergames can be designed to be easy to play but difficult to master, to easily attract players to the game and maintain their interest in keeping playing by challenging their skills. The high level of difficulty can be balanced with lenient punishment of players' fails in order to avoid stagnation (Juul, 2010, p. 42).[31] Finally, advergames can

[31] "Stagnation occurs when players are playing a game and reach a point where they appear to be stuck, with no way to go on" (Rollings & Adams, 2003, p. 271).

employ positive feedback to reward players' successful action. Juicy interfaces provide a pleasurable experience which makes players feel competent when playing a game (Juul, 2010, p. 45).

All these advantages of online casual games were perceived by marketers, and since then advergames have proliferated online. Evidence of this connection can be seen in the fact that when the term advergame was coined by the entrepreneur Giallourakis it was associated with online casual gaming (see p. 25 of this thesis). Online advergames are nowadays distributed in multiple forms; they are placed on microsites, embedded in brands' official websites, distributed through gaming portals, presented in the form of banners or launched on social media. The next chapters review many examples of online advergames in which the reader will find detailed information about the various techniques used to embed advertising messages through online casual games.

Social Advergames

Social game design is focused on creating interesting interaction among players (Juul, 2010, p. 21). This interaction is generated by providing players with features that allow them to compete, socialize, collaborate or connect through different forms of online communication (Gerhard, 2009, p. 13). Thus, the 'pull' (see p. 48 of this thesis) of social games is closely related to whom one is playing with (Juul, 2010).

Social games' evolution was marked by the inception of social networking with MySpace[32] in 2003. Facebook, which has become the most used social networking service worldwide since 2009, is also the social network where games applications have had the hugest impact, although many others, such as MySpace or Bebo, have contributed to the popularization of social casual games. Although not all Facebook games have been designed as social games, all of them include the social aspect because of the environment in which they are framed. Among the 208 applications listed as the 'most popular games' on Facebook in 2009, 100 (44%) could be defined as social casual games (Di Loreto & Gouaïch, 2010, pp. 1-2).

The first Facebook application to achieve a mass audience was a social game released in 2007, *Lexulous* (Kolkata, 2007), based on the

[32] MySpace is a social networking service with a strong emphasis on music.

commercial board game *Scrabble* (Mosher Butts, 1938) and combined with an online chat (Roebuck, 2012, p. 71). Its success resides in its asynchronous and social gameplay. Players play the game in turns, thus they don't need to be playing at the same time. The concept of 'asynchronous multiplay' was introduced by Bogost to designate situations in which players play a game "in sequence, rather than simultaneously", and breaks in the game are a way to accommodate demands of the physical world and game expectations (Bogost, 2004, p. 1).

The social network game genre has dramatically evolved since *Lexulous'* success. The release of *FarmVille*[33] (Zynga, 2009) in early 2010 achieved an astonishing breakthrough, and McDonald's was one of the first advertisers to recognize the importance of this phenomenon. In October 2010, the world's largest chain of hamburger fast-food restaurants started an exceptional action on Facebook by installing a branded farm on *FarmVille* (Rietveld, 2010). For one day only, Farmville players had the opportunity to interact with the McDonald's farm to earn virtual rewards. One of the virtual rewards was a McDonald's hot-air balloon to decorate their farms, a smart way to ensure the presence of the brand in the game after the campaign.

There are a series of elements within the Facebook context that can work as incentives or as reinforcers to play[34] from which advergames can benefit (Di Loreto & Gouaïch, 2010, p. 5). These features can be grouped by the purpose for which players use them: communication, competition or collaboration. Whereas the usefulness of these features deserves an in-depth analysis that will be carried out in Chapter 3, I will list some examples here that will help to illustrate how advergames can take advantage of these elements. Facebook has the potential to display a list of friends using an application. This feature has a communication purpose and can be used by advergames as an incentive to attract new players to the game. Another Facebook feature allows players to challenge their friends within the advergame. This element, which has a

[33] FarmVille is a farm management simulation Facebook game.

[34] Incentives can be positive or negative and are anticipated consequences of players' performance which help to motivate a specific behavior. Furthermore, reinforcers are consequences of behavior that reward expected behavior or punish undesirable behavior, teaching players how to perform (Di Loreto & Gouaïch, 2010, p. 5).

competition purpose, can be useful for both attracting new players and retaining active players. Furthermore, the advergame can implement the possibility to allow users to send gifts to their friends, which is a collaboration feature. These gifts can be related to the communication message, with the product or with the brand advertised in the game, such as in the case of the McDonalds' hot-air balloon. In conclusion, if designed with persuasive intentions, social features of advergames can be used to enhance meaningful experiences.

By January 2010 many companies had begun to be active in the social media world, and activity levels were relatively high for companies in all regions, particularly on Twitter, as reported by the public relations and communications firm Burson-Marsteller (2010, pp. 2-6). This increasing presence of companies in the social media world led to an interest in taking advantage of the potential of social casual games. Since then, social casual advergames have proliferated on Facebook. The following chapters analyze some examples in which the reader will find detailed information about several techniques that benefit from social features.

Nowadays, the combination of mobile and social games indicates a shift away from Facebook and a search for alternatives that use Facebook's single sign-in, which allows the collection of consumer information. Games for mobile devices are obviously different from games for desktops, and already serious innovations in social-game design are appearing that take advantage of the possibility to integrate location-based elements.

Mobile Advergames

In 1994, a mobile version of *Tetris* (Pajitnov, 1985) became the first game pre-installed onto a mobile phone, the Hagenuk MT-2000 device. Three years later, the very successful *Snake* (Nokia, 1997) arrived, becoming the most popular mobile game ever, embedded in more than 350 million devices worldwide (Parini & Sannicolò, 2012, p. 1). Mobile devices then became a new platform suited for casual games and by extension for advergames. As previously stated, casual games are by definition usable and interruptible, which means that they are quick to access and are designed to be played for short periods of time or in brief bursts, which facilitates access for players by providing flexibility in the

time invested in the game session (Juul, 2010, p. 50). These two traits make casual advergames suitable to be played on mobile devices.

In the early 2000s, advances in wireless communications and the rapid growth of users aroused the interest of marketers in mobile advergames (Roto & Kaikkonen, 2003, p. 205). Furthermore, at that time mobile phones with large color displays became the norm and enabled advergames to exploit two other traits of casual games: the design of emotionally positive fictions and the juiciness (see p. 49 of this thesis). In 2006, Coca-Cola released in India *Thumbs Up Everest Challenge* (2006), one of the first mobile advergames to be used as part of a brand-promotion campaign.[35]

Moreover, other characteristics of mobiles drew marketers' attention at the time. Firstly, they are carried everywhere, which means people have access to mobile advergames in situations where they do not have access to other devices such as computers. A study conducted by the Nokia Research Center revealed that participants who reported playing mobile games at home do it from places like bed before going to sleep or on the couch while watching TV (Koivisto, 2007, p. 4). Secondly, mobile applications run on full screen, which in the context of an advergame serves to transmit advertising messages without competition for user attention. In addition, mobile devices are location-aware, which can serve to provide customized experiences including location-based advergames, which will be discussed in next section.

Smartphone adoption has increased mobile data usage. iPhone and Android operating systems offer app stores that stimulate data usage (Parini & Sannicolò, 2012, p. 1). *Angry Birds* (Rovio Mobile, 2009) with its combination of addictive gameplay, comical style, and low price is a nice example of a game that has performed well on both mobile operating systems, with one billion downloads by May 2012.[36] The incursion of brands into this phenomenon was natural and even expected by consumers. In 2009, the son of a senior Volkswagen executive asked his father: ”Why hasn't Volkswagen got anything on iPhone?” That is how Fishlabs got its deal to develop the mobile

[35] www.jumpgames.com/games.php?categoryid=126&SubCategoryID=64

[36] www.rovio.com/en/news/blog/162/1-billion-angry-birds-downloads/2012

advergame *Volkswagen Polo Challenge* (Fishlabs, 2009), a racing game with 350,000 copies downloaded in the first five days.[37]

To sum up, mobile devices have become a suitable platform for mobile advergames, as they can be accessed everywhere and can benefit from the advantages of casual gaming. Furthermore, the introduction of GPRS and 3G technologies to mobile devices have facilitated incorporation in the gameplay of spatial parameters such as the location of players, their orientation or the speed of their movements (Winter et al., 2011, p. 2). These changes have led to the proliferation of pervasive mobile advergames.

Pervasive Advergames

The concept of pervasive games problematizes with that of the magic circle, the term that was coined by the historian Johan Huizinga in his book *Homo Ludens: a study of the play-element in culture* to describe the boundaries that define a game in time and in space (1949, p. 10). The term was borrowed by Salen & Zimmerman who applied it to digital games, claiming that playing a game "means entering into a magic circle, or perhaps creating one as a game begins" (Salen & Zimmerman, 2004, p. 95). Markus Montola, a game scholar and co-author of the book *Pervasive Games: Theory and Design*, makes use of this concept to define pervasive games as games that have "one or more salient features that expand the contractual magic circle of play spatially, temporally, or socially" (2009, p. 7).

The term 'pervasive game' was coined in 2001 when the advances in communication technologies—in particular the adoption of the Internet, mobile communication, and positioning technologies—opened new design spaces for pervasive play (Montola et al., 2009, preface xix). The incorporation of GPRS and 3G technologies into mobile devices has allowed them to became the most common gaming platform for this category of games (2009, p. 179). Pervasive mobile games[38] incorporate into the gameplay spatial parameters such as the

[37] Data retrieved from a presentation given by Michael Schade, CEO of Fishlabs, at the Casual Connect Europe, February 2010. The presentation is available online at: www.casualconnect.org/lectures/2010-europe-lectures/case-study-ad-funded-games/.

[38] It has to be noted that pervasive mobile phone games can be divided into two categories: pervasive games played with mobile phones and mobile phone games with

location of players, their orientation or the speed of their movements (Winter et al., 2011, p. 2). When playing the game, players travel in the physical world communicating, competing, and collaborating with other people in the game (Han, Cho, & Choi, 2005, p. 4).

As advergames' objective goes beyond the magic circle[39] given that advergames are designed to influence players in their real life attitudes or impressions of a brand, the properties of pervasive games have become of special interest for marketers. Pervasive advergames have been expanding the contractual magic circle of play spatially, temporally, and socially to deploy experiences that enhance interaction with the physical world.[40] As a result they have allowed players to interact with products in their natural environments and have also allowed players to transfer their game experiences into attitudes towards the brand in the physical world.

Unlike non-pervasive games, which have a spatial design that isolates players from their surroundings, pervasive games embrace their environments and inhabit a game world that is present within the physical world, expanding the contractual magic circle of play spatially (Montola et al., 2009, p. 12). *MyTown* (Booyah, 2009) is an example of how advergames can take advantage of this characteristic of pervasive games to establish a magical relationship between physical world and game world. This pervasive mobile game is a special version of Monopoly in which the player can buy or sell physical world properties. The game uses geo-location technologies to determine players' positions, which allow them to check-in on physical properties that they will be able to buy or sell. Physical products are also integrated into the gameplay. Players can enter stores and buy products virtually through barcode scanning, which can unlock virtual goods and manufacturer promotions. Logos, buildings and products can all be incorporated into the gaming environment through barcode scanning, image recognition or GPS. Therefore, the ability of pervasive games to inhabit a game

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pervasive features. In this thesis I am interested in the latter, because, as previously argued, I consider the nature of advergames to be digital.

[39] See Calleja, 2012; Consalvo, 2005; Jakobsson & Pargman, 2006; Juul, 2008; Lammes, 2008; Markus Montola, 2005.

[40] Several examples of this are analyzed in Chapter 3.

world that is present within a physical world can help brands to design experiences that enable users to have contact with products and brands in the physical world.

Furthermore, in non-pervasive games, game sessions are distinguished from other activities, even if they overlap (Montola et al., 2009, p. 14). Game sessions in Facebook games such as *FarmVille* can be micro-sessions that overlap with other activities in the social network, for example, but even though sessions could be quite short, they can be clearly distinguished from other activities. On the contrary, in pervasive games, ordinary life merges with gameplay session, expanding the contractual magic circle of play temporally (Montola et al., 2009, p. 14). Going back to the case of *MyTown* (Booyah, 2009), it is not possible to define clear boundaries between the game time and real time because every place the players visit in their ordinary lives can incite an action in the game. Moreover, players can decide to visit a specific place because of the game. Players visiting a store to scan products that they want to use in the game can actually decide to buy the items in the physical world. Furthermore, it can also happen that players who visit a place in their ordinary lives find products there that allow them to unlock virtual goods, for instance. This overlap between game life and the physical world allows brands to smoothly meddle in players' life without the intrusion being perceived.

Finally, pervasive games can expand the contractual magic circle of play socially by involving outsiders, which is a direct consequence of their temporal and spatial configuration (Montola et al., 2009, p. 14). In the case of *MyTown*, for example, the game can motivate a player to visit a specific location, an action that can attract other people not involved in the game to the same location. Let's say for example that players want to visit a café: they might call a friend to meet at that location. This characteristic of pervasive games can be useful to engage other customers in the branded experience even if they are not actual players of the game.

Although the three features described above are more characteristic of pervasive mobile games, other type of pervasive games can also benefit from them. Mobile phones are the most common gaming device for pervasive games, but it is possible to find many online advergames that use pervasive techniques to persuade consumers. The *Nokia Game series* (played from 1999 to 2003 and again in 2005) are an early example of

pervasive online advergames used to market Nokia models. The games were designed to encourage people to buy the phones and to teach them how to use the devices to their full potential. During the gameplay players received phone calls and text messages with information that was necessary to follow the storyline, which spatially expanded the contractual magic circle of play beyond the computer screen. Furthermore, players had to look for clues in advertisements on television and in newspapers, thereby expanding the contractual magic circle of play not only spatially beyond the computer screen but also temporally by maintaining players' engagement with the game during their ordinary lives.

To sum up, pervasive advergames have opened up new possibilities to provide meaningful branded experiences through digital games. These experiences allow players to interact with brands or products in daily life and allow brands to smoothly meddle in players' life whilst avoiding the intrusion being perceived. In addition, pervasive advergames can involve outsiders in the branded experience, which can be useful to engage more consumers.

In conclusion, a review of the evolution of advergames over the years serves to illustrate that the exploitation of the potential of digital games to convey advertising messages depends not only on technological innovations but also on the understanding of the medium. The earliest advergames designed in the early 1980s used innovative techniques to embed their brands, products and advertising messages within digital games. In the 1990s, however, even though there were great technological advances, the analysis of the most salient advergames of that period shows that it was not an innovative moment for this marketing strategy. Since then, technology has rapidly evolved giving rise to many different forms of advergames, each with characteristics that can be exploited to enhance branded experiences. However, as will be illustrated in Chapter 5, these features are not always exploited and are sometimes incorrectly utilized because of a lack of understanding of the medium.

1.3. Advergames' Effectiveness

As discussed in the previous section, the interest of marketers in advergames has been a reality for more than three decades, and the investment in this practice still grows steadily. When planning an advertising campaign, digital games are considered as an important possible strategy, and many advertisers already consider them a new advertising medium. In addition, marketing agencies try to motivate brands to consider digital games as part of their media plan by citing statistics evidencing the growth of the game industry, the changes in the game audiences, and the increasing session lengths in online gaming. These figures are useful to illustrate the growing interest in digital games as media for advertising. However, the use of statistical data referring to broad movements in the videogame and online advertising markets is an imprecise way to evidence the potential of the digital game market as a persuasive medium (Bogost, 2007, p. 163). Additionally, the little research focused on the effects of the use of branded games as advertising strategy is in many cases distorted, as will be shown below. Therefore, the effectiveness of advergames is still unclear.

This section is centered on understanding the factors that determine advergames' effectiveness. Secondly, I will also carry out a critical analysis of previous research conducted in this field, which, I will argue, is in many cases distorted. The identification of the factors that determine advergames' effectiveness and the evidence of inaccuracy in previous research support my belief that it is necessary to broaden the understanding of digital games as media for advertising. A deeper comprehension of how digital games can be used to persuade players can enable more rigorous research.

1.3.1. The Factors that Determine Advergames' Effectiveness

Advergames are considered effective when they bring a tangible benefit to a brand and therefore contribute to long-term brand equity. Advergames' effectiveness needs to be distinguished from advergames' effects, which are related to the short-term influence that specific elements have in players' responses (Wright-Isak & Faber, 1997, p. 4). However, advergames' effectiveness does not come down to an accumulation of effects, but it is influenced by other factors external to

the game. Therefore, in order to understand effectiveness, data about specific advergames' effects should be combined with a collection of facts that provide information about the probability that the target players have had access to the game, the intervening phenomena that may have affected the advergame's impact, and the net impact of those phenomena on tangible benefits (1997, p. 6).

Advertising has tended to be considered worthwhile if its costs are returned to the advertisers in the form of current or potential sales revenue. However, because of the multiple factors that affect advertising effectiveness and interfere in the process between message and purchase, many authors have suggested that effectiveness should be measured by looking at consumers' knowledge and beliefs (Aaker, Batra, & Meyers, 1992; Colley, 1961; Schultz, 1990). The discrepancies in the way advertising effectiveness is measured also generate differences in the way it is defined (Abraham & Lodish, 1990; McDonald, 1993; Schroer, 1990).

The marketing scholars Christine Wright-Isak and Roland Faber (1997) conducted research focused on resolving the issue of defining and understanding advertising effectiveness, and concluded that because of its complexity, its definition should be established by the consensus of a community of professionals. Therefore, the authors examined the debate within the industry and identified five recurrent criteria considered by professionals when measuring advertising effectiveness: the campaign objectives, the background situation, the creative strategy, the media strategy and the evidence of the results of the campaign (1997, p. 12).

Previously I have argued that an advergame is a digital game specifically designed for a brand (see p. 39). Thus, an advergame is an advertisement whose effectiveness depends on the five criteria mentioned above. For advertisers, it is difficult to control in advance the benefits of an advergame because they depend on many external factors. However, advertisers can use their previous experience and the results of research on advergames' effects to work on the other four criteria when designing a new game, as illustrated below, and also for designing pilot games whose validity is going to be tested.

Among the four criteria, the background situation is the most difficult factor to work with because it is composed of the personal and physical circumstances surrounding the player and the advergame in the moment the game is played. There are some elements that can be

controlled by advertisers, such as the placement or the time when the advergame is released. But there are other elements that depend on external factors, such as the personal circumstances a player experiences when he or she plays the game. Additionally, there are some elements of the background situation that depend on accumulative effects of previous campaigns, such as previous brand knowledge or previous brand image.

The second criteria mentioned by professionals to measure advergames' effectiveness are the campaign objectives. Advergames can involve more than one objective at the same time (see Eechambadi, 1993) and they can be very varied. Advergames' objectives can be focused on affecting players feelings, attitudes and/or behaviors towards a brand or a product (Wright-Isak & Faber, 1997, p. 4) and can be aimed at building brand identity, changing existing perceptions of the brand or product, or generating a trial purchase (1997, p. 6). If the advergame is part of a broader marketing mix,[41] the advertiser can consider the specific goals of the game in order to better differentiate the results generated by that specific advertising effort.

Thirdly, the media strategy is centered on when, where and which media will be used to deliver an advertising campaign. If the brand decides to design an advergame, a digital game is the medium selected to convey the advertising message. Therefore, it will be necessary to decide which type of advergame is going to be designed and on which platform is it going to be released: console advergame, mobile advergame, online advergame, social advergame or pervasive advergame. In addition, if it is delivered online, advertisers should decide where it is going to be placed: on a microsite, in a banner, on the official website of the brand or in a gaming portal, for instance. All these decisions will have consequences for the advergame's effectiveness.

Finally, the creative strategy determines what the advertising message will say and how the strategy will be executed. In order to decide how the creative strategy will be executed when using a digital game as a medium for advertising, it is necessary to understand the medium and to acknowledge which of its elements can be designed to convey the

[41] The concept of marketing mix was coined by the professor of marketing and advertising Neil H. Borden, who defined it as a "a mix of marketing procedures and policies" in an effort to "produce a profitable enterprise" (1984, p. 7).

advertising message. Of the four criteria on which advertisers can work to improve advergames' effectiveness, this is the one that differs more in comparison with other media. The interactive nature of advergames is a factor that has to be taken into consideration when deciding how to execute the creative strategy. The bi-directional communication process that is established within advergames means that the player's performance results in an unrepeatable message. However, there is still a lack of knowledge about the particular properties of the medium, which leads advertisers to use strategies in digital games that they use in other media without considering the specific features of the medium, in turn impoverishing the creative strategies of advergames or the way they are executed.

Therefore, the study of digital games as a medium for advertising and an understanding of which of their elements can be designed and how they can be designed in order to persuade players are needed to comprehend advergames' effectiveness. Chapters 3 and 4 are focused on broadening the understanding of how digital games can be used to convey advertising messages. Hence, this research aims to provide the tools needed to improve the conceptualization of advertising strategies for advergames and the procedure to execute the message strategy within the game. Firstly I will undertake in Chapter 2 a critical analysis of previous research in the field of advergames' effectiveness to show how the lack of understanding of the medium has resulted in slanted research.

1.3.2. An Overview of Advergames' Effectiveness Research

Due to the difficulty in measuring advertising effectiveness, academic research commonly focuses on the study of advertising effects in terms of the influence that specific elements within ads have on viewers' responses (Wright-Isak & Faber, 1997, p. 4). Since advertising-effects research is centered on the impact of specific elements, its study can be accomplished in controlled assessments that utilize a limited number of exposures to single messages over short time periods. Conversely, in order to evaluate advertising effectiveness, experiments should be carried out over longer periods of time and require more executions and more exposures. Academic research, however, is frequently unable to measure

the effects of multiple related messages over long periods of time, which is a determinant of evaluating effectiveness (1997, p. 6).

This section reviews previous research in the field of advergames' effectiveness and advergames' effects with the aim of demonstrating how the lack of understanding of digital games as a medium for advertising can result in biased research. In some cases, the use of methodologies borrowed from research applied to other media which fail to consider the peculiarities of digital games as a medium for advertising results in distorted findings. Furthermore, misunderstandings between the concepts of advergames' effectiveness and advergames' effects also lead in some cases to biased conclusions, which show the lack of recognition of the diverse factors that intervene in advergames' effectiveness.

In 2005 David Deal, a specialist in consumer behavior and marketing research, conducted an exploratory study which tried to investigate the ability of advergames to generate brand recall (2005). In this study, thrity-seven online game players played two different online M&M's[42] advergames that were variations of the puzzle game *Bejeweled* (Popcap Games, 2001). On the same website where the games were played banner ads of many brands were displayed. After playing both games, participants were asked to list the products, types of products, brands or brand names that they remembered seeing while playing. The author concludes that the exploratory study demonstrates that "advergames were found to generate significantly higher rates of recall" than banner advertisements in games, a finding that, in his words, "supports the notion of their advertising effectiveness" (2005, p. 1).

In his study, Deal (2005, p. 6) mentions many possible mitigating factors to consider in the results, such as the non-representative sample of participants or the length of time spent on each website. Therefore, he considers it as an explanatory study and proposes further research in the field. However, there are two more questionable issues in Deal's research that cause inconsistency in his results. His assertions and conclusions show a lack of understanding of the factors that determine advergames' effectiveness and also the peculiarities of digital games as media for advertising. As explained above, advergames' effectiveness depends on many factors, and therefore to evaluate advertising effectiveness, experiments should be carried out over long periods of

[42] M&M's is a brand of chocolate candies.

time and require several executions and several exposures to the advertising (Wright-Isak & Faber, 1997, p. 4). Deal's research does not take into consideration any of the factors that can influence the different results in brand recall between the games and the banners, such as the background situation (1997, p. 12). Therefore, it is not warranted to draw conclusions about advergames' effectiveness in general from such a study.

Furthermore, Deal does not mention anything about the way the advertising message is embedded within the advergame played by the participants. The author mentions only that the logo of the brand is present in the game, but he does not clarify how the logo is integrated into the game or if there are other elements of the game that have also been designed with persuasive intentions. Moreover, the author opts for two variations of the puzzle game *Bejeweled* (Popcap Games, 2001), without explaining in what way(s) the popular game was modified and with which intentions. He neither mentions if the two games presented differences in the way the advertising message was embedded within them, nor if the results in recall were different or the same for both cases.

If the strategy used to embed the advertising message had been explained in Deal's study, it could have been used to draw some conclusions about advergames' effects on brand recall when placing logos in the same way that games of the sample do. Those conclusions could have been extended to other advergames using the same strategy but not to advergames in general. However, the conclusions show a lack of awareness of the different possibilities of logo placements within digital games and the consequences that the different placements could have had on the logo's recall due to players' performance. To sum up, the lack of understanding of the medium and the factors that determine advergames' effectiveness have led to slanted research whose conclusions do not contribute to the theory in this field.

Another study that supports my assertions was conducted in 2008 by a group of scholars specialized in strategic communication (Wise, Bolls, Kim, Venkataram, & Meyer). This study tried to examine how variation in the thematic connection between the game and the brand is associated with the attitude of players toward the advergame and toward the brand. Forty participants were involved in testing four advergames. Each participant played two randomly assigned advergames,

both with either high or low thematic connection. In order to measure their attitude toward the games and the brands, the authors used standard measures of attitudes that previous research[43] had already demonstrated to be reliable and valid (2008, p. 31). The authors conclude that the analysis reveals that "the change in brand attitude attributable to game enjoyment is stronger for product-relevant advergames than for product-irrelevant advergames" (2008, p. 32).[44]

In this case, the difference between advergames' effectiveness and advergames' effects is clear. The research is focused on the effects of thematic relevance between the game and the brand within advergames. Nevertheless, once again the manner in which the advertising message is embedded in the game is not explained. The authors explain the gameplay of the four advergames analyzed, but they do not explain how elements within them are designed to persuade players. Therefore, inasmuch as the game sample is non-representative, the conclusions should not be extended to advergames in general because the results can be conditioned by the different ways in which the message is embedded within the game. Furthermore, the authors fail to provide the necessary information to apply the conclusions to advergames using the same strategies.

Research on advergames' effectiveness or advergames' effects is not extensive; however, it is possible to identify flaws similar to those discussed in this section in other investigations.[45] Inconsistent results like these are not uncommon in persuasion research (O'Keefe, 1990), which means that more complex research designs are needed. Digital

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[43] The first study, conducted by Kak Yoon, Paul D. Bolls and Annie Lang (1998) proposed a scale to measure attitude toward the brand that consists of three sets of bipolar adjectives placed on seven-point scales: Positive/Negative, Good/Bad and Favorable/Unfavorable. The second study, conducted by Darrel D. Muehling and Russel N. Laczniak (1988) proposed a scale to measure attitude toward the ad that consists of six sets of bipolar adjectives placed on seven-point scales: Positive / Negative, Good / Bad and Favorable / Unfavorable. Appealing / Unappealing, Pleasant / Unpleasant, Dynamic / Dull, Attractive / Unattractive, Enjoyable / Not Enjoyable, and Refreshing / Depressing.

[44] In the study "relevance is conceptualized as the degree to which the game has a thematic connection to the advertised product" (Wise et al., 2008, p. 32).

[45] Gabriel, 2010; Moore, 2006; Nicovich, 2005; Schneider & Cornwell, 2005; Winkler & Buckner, 2006; Yang, Roskos-Ewoldsen, Dinu, & Arpan, 2006.

games have unique properties that make them a totally different medium from others commonly used for advertising purposes. Thus, an understanding of how digital games convey meaning is particularly relevant to research on advergames' effectiveness.

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Even though advergames are a marketing strategy that has existed for more than three decades, and investment in this practice grows steadily, the reality is that there is little research on this subject and a better understanding of this practice is necessary to assess its scope while improving its effectiveness.

Up to this point I have proposed a new definition for advergames (see p. 25), which serves as a starting point to support my arguments. I have also carried out an analytical review of advergames history (see section 1.2.), which has allowed us to understand the evolution of this practice over the years. Finally, this chapter finished with a section focused on identifying the factors that determine advergames' effectiveness. In this final section I have presented the arguments that support the goals of this research. As previously concluded, a better understanding of how digital games can be used to convey advertising messages —the issue that will be addressed in Chapter 4— is of particular relevance to assess advergames' effectiveness and to improve how creative advertising strategies are executed within digital games. Moreover, broadening comprehension of how to use digital games with persuasive intentions —the issue that will be addressed in Chapter 3— is also necessary to conduct rigorous research in this field.

2. A Critical Analysis of Procedurality

This chapter is a critical literature review of previous research about persuasive communication within digital games that can contribute to understanding how games can be used to convey advertising messages. The objective of this chapter is to answer the second research question of this thesis: *How should the study of persuasive communication through digital games be approached?* In order to answer this research question, I draw upon a literature review[46] to pinpoint the validity and usability of statements made by other scholars and to gather and formulate the necessary arguments that allow me to outline a theoretical model for the study of persuasive communication within digital games, which I present in the next chapter.

As briefly mentioned above, the first two books by Bogost (2006, 2007) were the starting point for the *procedural school,* followed not just by academics (e.g. Brathwaite & Sharp, 2010; Flanagan, 2009; Mateas, 2005; Swain, 2010; Treanor & Mateas, 2009) but also by the game industry. In his book *Persuasive Games: The Expressive Power of Videogames* the author contends that as procedural environments, digital games open up a new domain for persuasion (2007, preface viii). However, different authors have already found shortcomings in Bogost's claims (e.g. Ferrari, 2010; Heide & Nørholm Just, 2009; Sicart, 2011). In 2011 the game scholar Miguel Sicart published an article *Against Procedurality* that has initiated a debate about the validity of *proceduralism*. In his article Sicart claims that while proceduralists argue that the rules of the game create the meaning, actually the "meaning of a

[46] To understand what a literature review involves, see Silverman, 2013.

game cannot be reduced to its rules, nor to the behaviors derived from the rules, since play will be a process of appropriation of those rules, a dialogue between the system and the player" (Sicart, 2011, para. 57). Due to the high relevance of the *procedural school* to the study of digital games' persuasiveness and the significance this debate has acquired within the field of game studies, I have decided to organize this literature review around Bogost's statements.

This chapter is divided into three main sections. In the first section I undertake a short review of previous research on persuasive communication that allows me to identify how and when the academic study of persuasiveness in digital games started and the importance of the *procedural school* to this field (section 2.1.). Then, I focus my attention on Bogost's statements, dividing my critical analysis into two parts: firstly, Bogost's definition and study of persuasive games (section 2.2.), and secondly Bogost's application of his theory about persuasive games to the domain of advergames (section 2.3).

2.1. Previous Research on Persuasive Communication

Previously I have argued that an advergame is a digital game specifically designed for a brand with the purpose of conveying an advertising message (see section 1.1.2.). Thus, a digital game is the medium selected by a brand to convey an advertising message in the communication process it establishes with its customers. Furthermore, I have stated that advertising messages within advergames can be focused on affecting players' feelings, attitudes and/or behaviors towards a brand or a product and can be aimed at building brand identity, changing existing perceptions of the brand or product, or generating a trial purchase.

According to the communication scholar Gerald R. Miller any message that is aimed to shape, reinforce or change the perceptions, emotions, beliefs, behavioral intentions and behaviors is to be considered as persuasive communication (2002, p. 7). Therefore, the purpose of advergames is to convey persuasive messages that intentionally aim to affect the responses of another or others.

The study of persuasive communication began in Ancient Greece and has a history of more than two millennia. Early scholars Plato and Aristotle framed rhetoric as a technique for oral persuasion, which was

followed by the notable Roman scholars Quintillian and Cicero. It was Cicero who described rhetoric as a "speech designed to persuade" (quoted in Burke, 1969, p. 49). Many centuries later the development of mass media facilitated the broadening of the concept of rhetoric beyond oratory.

Although the focus of the study of persuasive communication has been overwhelmingly focused on verbal strategies, the development of film, television and visual advertisement have favored the expansion of the term. The philosopher Kenneth Burke (1987-1993) was the first to acknowledge the persuasive potential of nonverbal domains. “Wherever there is persuasion,” he wrote, “there is rhetoric. And wherever there is ‘meaning,’ there is ‘persuasion.’” (Burke, 1969, p. 172). Burke’s work gave rise to the study of persuasiveness in other domains, increasing interest in visual rhetoric, understood as the art of using imagery and visuals persuasively. A significant contribution to this field comes from Roland Barthes' essay "Rhetoric of the Image" (Barthes, 1977), which provides insight into the way advertising images may contain meaning. However, although the study of visual rhetoric has served to reveal the persuasive potential of many nonverbal domains, game scholars (e.g. Bogost, 2007; Ferrari, 2010; Frasca, 2007) have identified unique properties of digital games that deserve special attention in order to understand the way they convey meaning.

The game scholar Gonzalo Frasca identified in 2001 the potential of digital games as a "medium for fostering critical thinking and discussion about social and personal problems" (2001, summary ix). Later, the author defended his PhD thesis *Play the Message. Play, Game and Videogame Rhetoric* (Frasca, 2007) in which he proposed a framework for analyzing game rhetoric that aims to explain how games convey meaning.

However, it was not until the publication of Ian Bogost's (2007) book *Persuasive Games: The Expressive Power of Videogames* that academics began to investigate the way digital games convey advertising messages. In his book the author argues that as procedural environments, digital games open up a new domain for persuasion (2007, preface viii). 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 comes from the union of two concepts: procedurality and rhetoric. Bogost defines procedurality as the "way of creating, explaining or understanding processes" and processes as the "methods, techniques and logics that drive the operation of systems" (Bogost, 2007, p. 2). Therefore, procedural rhetoric refers to the power of computational systems to make persuasive arguments. Bogost calls procedural rhetoric "the art of persuasion through rule-based representations and interactions rather than the spoken word, writing, images or moving pictures" (2007, preface ix). He considers advertising as a possible domain to apply procedural rhetoric and advergames a category of persuasive games (Bogost, 2007, p. 46).

Since the publication of Bogost's first two books (2006, 2007) procedural rhetoric has been the focus of attention of many scholars working on persuasive strategies in digital games (e.g. Ferrari, 2010; Flanagan, 2010; Heide & Nørholm Just, 2009; Swain, 2007). 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, some authors have identified shortcomings in proceduralists' assertions (e.g. Ferrari, 2010; Heide & Nørholm Just, 2009; Sicart, 2011). Due to the high relevance of proceduralism to the study of digital games persuasiveness, I have decided to conduct a critical literature review around Bogost's arguments in which I use the shortcomings found by other scholars to inform my claims and propose a new approach for the study of persuasive communication within digital games.

2.2. Ian Bogost on Persuasive Games

As previously explained, Bogost assumes that persuasive games are digital (2007, p. 171) and suggests that the procedural nature of digital games differentiates them from other types of persuasive media (see p. 27 of this thesis). For that reason, the author considers that previous theories on persuasive communication, such as visual rhetoric, are not valid for understanding how digital games can be used to convey persuasive messages. Bogost claims that the capacity of digital games to

operationalize rules opens a new domain for persuasion, and he chooses the term *procedural rhetoric* to refer to the art of persuasion through rule-based representations (2007, preface viii).

Bogost starts by stating that in procedural media such as digital games "images are frequently constructed, selected, or sequenced in code", which subordinates them to the game process (2007, p. 25). Following this reasoning, the author defines persuasive games as digital games "that mount procedural rhetoric effectively" (2007, p. 46), from which it can be concluded that Bogost assumes that persuasiveness in digital games completely relies on procedural rhetoric and that other persuasive dimensions do not operate within procedural media.

Bogost's theory is grounded in his statement that, of all essential properties of digital games identified by Murray (1997, p. 71) (see p. 27 of this thesis), procedurality alone is unique to the digital. The author considers that procedurality is the principal value of digital games because even though procedurality can be read in both computational and noncomputational structures, "computational procedurality places a greater emphasis on the expressive capacity afforded by rules of execution" (Bogost, 2007, p. 4). In order to support his statement on the expressive capacity of digital games as persuasive environments, Bogost (2007, p. 35) draws on their capacity to change player beliefs and attitudes by favoring the creation of mental images in players. To defend this assertion, Bogost appeals to Hill's notion of vividness.

Vividness is defined by the rhetorician Charles A. Hill as "the relationship between the creation of mental images through reading text and the process of developing or revising one's beliefs and attitudes based on this mental images" (2004, p. 31). Hill points out that images offer greater vividness than verbal narration or written description and proposes a continuum of vividness in which the actual experience is considered the most vivid type of information, followed by moving images with sound, static photography, realistic painting, line drawing, narrative, descriptive account, abstract analysis and statistics. The author refers to a study conducted by Smith and Shaffer (2000) to assert that vivid language "makes a persuasive message easier to comprehend and more likely to be remembered" if the "vivid elements are clearly and explicitly relevant to the message itself" (Hill, 2004, p. 32).

Bogost (2007, p. 35) states that procedural representations seem to increase the persuasive properties Hill attributes to vividness.

Furthermore, Bogost claims that procedural representations with high process intensity[47] and with meaningful symbolic representations in their processes, especially digital games, should be considered the most vivid type of information after actual experience. At this respect, the media scholars Jonas Heide and Sine Nørholm Just have argued that vivid representations are actually essentially the same as other persuasive forms (2009, p. 57) and their effectiveness will depend on the specific features of each campaign. As with other persuasive forms, the procedural mode of persuasion may hold a potential that is not always fully realized.

However, although Bogost claims that procedurality is the only property of digital games unique to the digital, he later contradicts himself when he refers to the potential of sophisticated interactivity — another of the properties mentioned by Murray (1997, p. 71)— to empower procedural rhetoric within persuasive games (Bogost, 2007, p. 43). Bogost refers to the Aristotelian enthymeme in order to explain the potential of sophisticated interactivity within persuasive games. Aristotle uses the term enthymeme to refer in rhetoric to the equivalent of deduction in human reasoning (1979, p. 32). Consequently, in rhetorical enthymemes the orator omits a proposition that is deduced by the listener from accepted opinions.

Following Bogost's reasoning, in digital games sophisticated interactivity can be used to formulate enthymemes leading the player to fill in a proposition suggested by the rules. The author calls the gap between the rule-based representation of the game and the player subjectivity the "simulation gap" (Bogost, 2007, p. 18). Bogost suggests that, as a procedural environment, a digital game can be seen as a "system of nested enthymemes, individual procedural claims that the player literally completes through interaction" (2007, p. 43). Therefore, the author argues that procedural rhetoric can be empowered by sophisticated interactivity favoring deductive reasoning in players, who are guided to fill in the simulation gaps between the rule-based representation of the game and player subjectivity. Consequently,

[47] Chris Crawford defines process intensity as the "degree to which a program emphasizes processes instead of data" (1987: 1). Process here refers to the algorithms and equations a program processes; and data refers to data tables, images, sounds, and text. "A process-intensive program spends a lot of time crunching numbers; a data-intensive program spends a lot of time moving bytes around", Crawford (1987: 1) explains.

Bogost claims that players' behavior and interpretation within digital games can be suggested by the rules and guided by sophisticated interactivity. However, Heide and Nørholm Just claim that Bogost's arguments do nothing other than show that participation is inherent in the process of persuasion itself and not unique to procedural rhetoric (2009, p. 57).

Furthermore, guiding players' behavior through rules is not as simple as Bogost presents it. According to the game scholar Simon Ferrari, one of Bogost's flaws is to presume the existence of ideal players who play the game in a way the game designer is expecting them to play it (2010, p. 2). However, there is not any single correct way to complete an enthymeme. Although the rules of digital games usually cannot be discussed and changed during play because they are normally authored in a code which is inaccessible to players (Sicart, 2009, p. 27), it has been demonstrated by empirical research that, when possible, players enjoy adopting their own rules and disregarding the designed ones (see Taylor, 2009). Moreover, the more complex a game gets, the more difficult it becomes to predict the player's performance, and at the same time the range of meanings the game affords widens (Ferrari, 2010, p. 2).

Bogost starkly contradicts himself when, on one hand, he argues that digital games are the most procedural artifacts because they are the most capable of serving representational goals compared to other types of computational media (2007, p. 45), while, on the other hand, as Sicart points out, he discounts player expression, turning play into an instrumental action (2011, p. 7). In this sense, following the game scholar Simon Ferrari's arguments, Bogost is ignoring player creativity and forgetting that player choices can lead to a manipulation of the dominant rhetoric intended by the game designer (2010, preface x), resulting in a misunderstanding of the proposition omitted in the syllogisms. The consequences of this problem in an advergame would be that the player would not understand the advertising message in the way intended.

Additionally, the limitation of interactivity with the intention of guiding players' behavior minimizes the sense of pleasure while playing digital games. Murray (1997) states that the sense of pleasure is enhanced within digital games by three properties: immersion, the pleasurable "experience of being transported to an elaborately simulated

place" (1997, p. 98); agency, "the satisfying power to take meaningful action and see the results of out of decisions and choices" (1997, p. 126); and the pleasure of transformation characteristic of digital environments (1997, p. 154). The consequence of disregarding player's creativity is the absence of the pleasurable experience of agency and a limitation of the pleasurable experience of transformation.

Games produced and analyzed under the proceduralist domain are closed systems in which play is predictable, which makes them unbalanced, and the game's balance is determinant in keeping the player in the game. A balanced game is "one where the main determining factor for the success of the player is the skill level of that player" (Rollings & Adams, 2003, p. 240), which means that a better skilled player should be more successful than a less able player. A game containing an active balance will be able to "either increase difficulty or to adapt the games to the ability of the player" (2003, p. 267). Balancing a game is useful to avoid stagnation[48] —one of the main reasons people stop playing, to avoid trivialities, to allow a setting of the difficulty level, to provide a consistent challenge and to provide the player with a perceivably fair playing experience (2003, p. 271). Games in which play is predictable and creativity is limited are unbalanced and therefore, following one of Sicart's criticisms of games produced under the proceduralist domain, "too rigid, obvious and banal" to make users want to play them (Sicart, 2011, p. 11). Consequently, if games produced and analyzed under the procedualist domain are not attractive for players, it is difficult for them to be useful to support proceduralist arguments.

I would conclude that Bogost's statements on procedural rhetoric are useful in showing how arguments can be embedded in the rules of a digital game. However, the procedural nature of digital games is not the only game characteristic that can be used to convey persuasive messages. As digital games, advergames are also spatial, interactive, encyclopedic, and networked environments, and these characteristics can also be exploited with persuasive intentions. Furthermore, the limitation of players' creativity in order to guide players' behavior reduces the sense of pleasure during the game session and results in unbalanced games. Therefore, other persuasive dimensions should complement procedural

[48] "Stagnation occurs when players are playing a game and reach a point where they appear to be stuck, with no way to go on" (Rollings & Adams, 2003: 271).

rhetoric with the objective of providing meaningful pleasurable experiences. As will be further explained in Chapter 3, the use of other persuasive dimensions within digital games facilitates the design of games that respect players' creativity and provide freedom to the players to experience unique and unrepeatable experiences as the result of their own performance. At the same time, this freedom does not need to become an obstacle to the persuasive process.

Consequently, persuasive games should not be defined as digital games "that mount procedural rhetoric effectively" (Bogost, 2007, p. 46). Instead, following Miller's (2002) definition of persuasive communication, I suggest defining persuasive games as digital games that aim to shape, reinforce or change the perceptions, emotions, beliefs, behavioral intentions and behaviors of players.

2.3. Ian Bogost on Advergames

Bogost considers advertising a domain where one can apply procedural rhetoric and therefore considers advergames as a category of persuasive games (2007, p. 46). Following this reasoning, the author argues that advergames are "created specifically to host a procedural rhetoric about the claims of a product or service" and proposes to define them as "simulations of products and services" (2007, p. 200). However, I would maintain that Bogost's definition of advergames is inaccurate as a result of his erroneous definition of persuasive games, as I will explain below.

I argued above that persuasive games cannot simply be defined as digital games "that mount procedural rhetoric effectively" (Bogost, 2007, p. 46), but following Miller's (2002) definition of persuasive communication, as digital games that aim to shape, reinforce or change the perceptions, emotions, beliefs, behavioral intentions and behaviors of players. Furthermore, I have stated that the purpose of advergames is to convey persuasive messages that intentionally aim to affect the responses of another or others (see p. 68 of this thesis). Therefore, advergames can be considered a category of persuasive games in the sense that they are understood in this text.

Following the arguments presented in the previous section, advergames, as persuasive games can make use of the procedural nature

of digital games to persuade players as well as of the other unique digital-game characteristics: their interactivity, their networked communication, their capacity to hold and manipulate information and their power to represent spaces through which players can navigate. It follows that advergames are not created specifically to host a procedural rhetoric but to persuade players. For that purpose, advergames can use procedural rhetoric or any other persuasive dimension favored by another of their properties. In the next chapter I will explain in detail all the persuasive dimensions that can be exploited in digital games.

Additionally, Bogost argues that within advergames, the overlap between the game goal and the learning goal is more persuasive than their complete separation (2007, p. 160). Though this overlap can make sense in games with educational purposes, it is not so logical for advergames (Heide & Nørholm Just, 2009, p. 59). In an educational game trying to teach history, for instance, it would be a good idea not to allow the player to succeed in the game without actually having learned the lesson. However, the same strategy could be difficult to achieve if the purpose of an advergame is to change players' attitudes or behaviors because a player can act to agree with the point of the game in order to win it without actually changing his beliefs or actions in the physical world. Moreover, it is important to underline that advertising messages are usually unwanted communication (Messaris, 1997, p. 5). Therefore, in order to avoid players' resistance, the persuasive intentions of the game should not be as obvious as the persuasive intentions of an educational game. To conclude, though Bogost approaches the study of political games, educational games and advergames from the same point of view, the fact is that digital games with advertising purposes differ from those with educational or political purposes, and their persuasive strategies have particular qualities that should be studied separately.

Furthermore, when Bogost asserts that advergames are "simulations of products and services" (2007, p. 200) he is grounding his definition in his argument that they are specifically created to host a procedural rhetoric about the claims of a product or service (2007, p. 200). However, as previously argued, digital games can convey advertising messages not only through their rules, but also through other persuasive dimensions.

Moreover, Bogost's definition of advergames is supported by his claim that advergames which try to "correlate advertising messages with

the actual features and functions of goods and services" fit better with the properties of the digital-game medium than do advergames which attempt to "manufacture needs in consumers by suggesting affinities between aspirations and brands" (—preface x). Nevertheless, this assertion does nothing other than show that Bogost is ignoring any expressive capacity of digital games beyond the procedural as I explain below.

Correlating advertising messages with the actual features and functions of goods and services implies assuming that consumer preferences reflect rational decisions. This approach takes for granted that the consumer is able to differentiate products according to their characteristics and that he uses rational thinking to make decisions and to differentiate the offers made by one company from those made by its competitors. This strategy focuses on specific product properties and uses analytical, quantitative and rhetoric methods to convince consumers. However, although Bogost asserts that this strategy is the one that better fits with the properties of the digital-game medium, the fact is that the use of this strategy in digital games entails a series of difficulties compared to its use in other advertising media. These difficulties are related to (1) information overload, (2) channel noise, and (3) semantic noise.

1. **Information Overload:** One of the unique properties of digital games as media for advertising is that they have the potential to contain large amounts of information encyclopedically that can be selectively revealed at appropriate places during play (Salen & Zimmerman, 2004, p. 88). However, researchers in consumer behavior Jacoby, Speller and Kohn have demonstrated that consumers can make poorer purchasing decisions when they are provided with more information because they can feel overloaded (Jacoby, Speller, & Kohn, 1974, p.69). Consequently, consumers tend to use information-processing strategies to limit the amount of information that they process to make purchasing decisions (Jacoby, 1984, p. 434). Therefore, advergames should not be designed to force players to process large amounts of information. Rather, advergames should permit the player to access and reject information at will. For that purpose, as complex automated systems, advergames can hide

information from players and then reveal it at particular moments of the game session. This can allow brands to retrieve information from players' performance that can be useful to convey customized messages to their consumers, avoiding information overload.

2. **Channel Noise.** The interactive nature of digital games makes players 'co-authors' of the advertising discourse. This means that advertisers cannot totally control the way players interpret the information hosted in the game or the particular meaning this information can acquire through players' performance. All this interactivity can result in channel noise, namely any distraction or distortion of the message caused by the way players interact with it (Narula, 2006, p. 27). In order to avoid channel noise within advergames, advertisers should not think about limiting players' freedom because this can result in unappealing advergames in which players feel that their performance does not have consequences for the outcome of the game. Players who feel their actions are insignificant may become dissatisfied with the game and then link that disappointing feeling to their attitude toward the brand. Trying to completely control the way the message is conveyed is impossible within advergames because of their interactive nature. In addition, if there is any important idea that the brand needs to convey to players, advergames' designers can make use of redundancy by repeating the main idea of the message in different parts of the advergame to reduce channel noise (Narula, 2006, p.29). This can help designers to ensure that players do not miss the main idea regardless of their performance within the game.
3. **Semantic Noise:** As encyclopedic systems, advergames can confound players by offering contradictory or incoherent information that produces semantic noise. Semantic noise in advergames occurs when the player does not ascribe the same meaning to the advertising message as the one intended by the advertiser (Shannon and Weaver in Narula, 2006). When designing advergames it has to be taken into consideration that not only those elements of the game that are intentionally designed to convey meaning are providing information to the user, but that every aspect of the advergame that can be

> regarded as information can contribute to the meaning the players ascribe to the advertising message. Therefore, advergame designers should pay attention to every aspect of the advergame when trying to convey an advertising message. Furthermore, players' feedback can be very valuable within advergames to assess the effects of possible semantic noise. In that sense, advergames can use interactive actions to discover whether players understand the message in the way intended.

Furthermore, although Bogost contends that advergames which attempt to "manufacture needs in consumers by suggesting affinities between aspirations and brands" (preface x) do not fit with the properties of digital games, advergames, as digital games, have the capacity to deploy pleasurable experiences (see p. 73 of this thesis) that can be useful in conveying advertising messages that aim to influence players' attitudes or appeal to their emotions. This marketing approach, known as experiential marketing, considers that consumers do not think about specific products but about concrete situations in which they need solutions to specific problems or desires (see Schmitt, 2000). According to marketing scholar Bernd Schmitt (2000) irrational and emotional aspects involved in a purchasing decision have the same importance as the rational and logical elements. Experiential marketing is focused on delivering memorable experiences that produce emotions and also transformations in individuals. Implementing this marketing strategy within advergames consists of allowing consumers to "design their own meaningful experiences" (Norton, 2003, p. 24). However, delivering engaging experiences is not enough to achieve the advertising goals. When designing experiential marketing strategies for advergames, advertisers need to think about how to make them meaningful from the brand's perspective. Therefore, the brand has to become a part of the players' personal and meaningful experience.

An example of good understanding of how to use digital games to design branded experiences is the *World's Worst War* (Hakuhodo, 2007). This award-winning multiplayer online mobile game was launched to promote two new Tohato snack flavors: Tyrant Habanero Burning Hell Hot and Satan Jorquia Bazooka Deadly Hot. In the game customers were encouraged to buy one of the two snacks in order to choose their Master. In the packet they found an access code to join

one of the two online armies with which they could fight a battle every day at 4 a.m. Players were able to choose their battlefield from thirty-one spots. The army that conquered all the battlefields won.

According to the developers, the game was so incredibly successful because of the social interaction. The player was able to get promotion in the army by recruiting friends as warriors under him, and this system spread the game all over the country. Players also started to meet up on social networks to set up strategies. In addition, there were war reporters who sent SMSes round the clock, adding reality to the game. Every new player was supposed to buy the product. Thus, sales and site accesses increased dramatically to 100,000 page views per day.

World's Worst War had most of the ingredients that make a branded experience a success. The consumers not only approached the experience voluntarily, but they bought the product before being involved in the experience. Once in the game, it turned into such a meaningful experience for them that they were willing to wake up in the middle of the night to join a battle. In addition, the players themselves spread the word about the game in order to recruit warriors. It was such an engaging experience that they voluntarily spent extra time meeting their friends on social media to set up strategies, that meant extra time dedicated to talking about the brand and the meaningful experience they were enjoying. And all those positive feelings were inevitably associated with the brand, helping to build the brand's image.

It can be concluded that the use of emotion strategies within advergames can be useful in designing meaningful experiences that take advantage of the expressive capacities of digital games. These strategies can be particularly useful when consumers have sufficient information about the product advertised (Armstrong, 2010, p. 26). However, advergames that incorporate emotion strategies should not neglect players' creativity in order not only to initially attract players to the game but also to engage them to keep playing. Also, when using experiential marketing strategies to convey advertising messages it is important to find a way to make them meaningful from the brand's perspective.

Advergames should not be defined as "simulations of products and services" (Bogost, 2007, p. 200) that try to "correlate advertising messages with the actual features and functions of goods and services" (preface x), because they are useful beyond conveying advertising

messages that aim to provide information. Rather, advergames should be defined as digital games specifically designed for a brand with the aim of conveying an advertising message.

With the aim of exemplifying the points of my critical analysis of Bogost's statements, let's look more closely at the advergame *Prune to Win* (Fiskars, 2005), mentioned by Bogost as an example of how to mount procedural rhetoric effectively. The game was released with the purpose of presenting four of Fiskars' gardening tools. The player in the game needs to trim different plants growing in a garden. For that purpose, the player has to use four different Fiskars' gardening tools, each of them suitable for a particular plant. Trimming a plant with the appropriate tool increases the player's score. There is no outcome other than increasing the player's score, and there is no possibility of leveling up; the game does not increase in difficulty or change the challenges after the first level.

It could be said that *Prune to Win* has all the ingredients to effectively persuade the player from Bogost's point of view. The game draws on procedural rhetoric to convey a message with which the player can interact, and that message is not received passively. The game also presents the highest level of product-game integration, letting the user interact with the product in its natural context. Furthermore, the game goal and the learning goal overlap, which implies that the player needs to understand the message in order to succeed in the game. However, *Prune to Win* is an advergame and not an educational game. The purpose of the game should be not only to make players understand the usefulness of the gardening tools and maybe make them feel the need to buy them but also to give players a clear understanding that, when purchasing gardening tools, the best option is Fiskars' products.

However, when playing the game it is impossible to find any arguments to support the message that Fiskars is the brand to be purchased. It is impossible to know what Fiskars' gardening tools look like in the physical world: if they are light or heavy or if they are made of a resistant material, for instance. Neither the gardening tools nor the brand is related to a lifestyle with which the player could identify. Consequently, it could be concluded that the player may be persuaded to buy the gardening tools presented in the advergame but not specifically Fiskars' gardening tools. Players may understand that they need a pruning stick to trim a tree, but they do not have many reasons

to look for a Fiskars' stick and thus may just buy the first pruning stick they find when they enter a store.

Furthermore, with the intention of guiding players' behavior through the rules of the game, *Prune to Win* limits the interactivity in the game, neglecting players' creativity. Additionally, the game is simple to play and also easy to master, and therefore is unbalanced. It does not challenge the player, who could be disappointed after playing it, which may be to the detriment of the brand's image. The final result is a game that is so obvious and banal that it is difficult to find reasons why a player would approach and play it.

The analysis of this advergame reveals that games following Bogost's theory may not be achieving their communication goals. Moreover, games designed under the proceduralist domain may be unattractive to players. The main problems of the application of Bogost's theory to advergames lie in ignoring any expressive capacity of digital games beyond the procedural and assuming that advergames can be designed like other types of persuasive games.

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To sum up, in this chapter I have suggested defining persuasive games as digital games that aim to shape, reinforce or change the perceptions, emotions, beliefs, behavioral intentions and behaviors of players. Furthermore, following Heide and Nørholm Just's statements, I have argued that procedural rhetoric should be seen not as a communicative revolution and the unique persuasive domain available within digital games but as a strategic option which could be useful for some purposes, but not for others, and that like other persuasive forms, they may hold a potential that is not always fully realized. With this claim I also try to suggest a new approach to study how persuasive messages can be conveyed through digital games (RQ3). I suggest that the study of how persuasive messages can be conveyed through digital games should be addressed by taking into consideration all the possible dimensions that can be used within digital games to persuade players. Furthermore, I claim that the use of other persuasive dimensions can facilitate the design of persuasive games that respect players' creativity and provide freedom to the player to experience unique and unrepeatable experiences as a result of their own performance. In this sense, it is important to comprehend how all the different persuasive dimensions

relate to each other, the issue central to Chapter 3. With this new approach I aim to broaden the understanding of how persuasiveness can be implemented within digital games, which is of great relevance for the study of advgergame's effectiveness (see section 1.3).

3. Persuasive Communication through Digital Games

In the previous chapter I demonstrated that procedurality statements, in spite of being very useful for understanding the games' persuasiveness, overlook fundamental properties of digital games that should be considered in order to have a complete comprehension of their advertising potential. This thesis assumes that other persuasive dimensions can complement procedural rhetoric in the task of conveying advertising messages through digital games and proposes to approach the study of persuasive communication within digital games by exploring these dimensions.

In the Introduction I pointed out that in this thesis I focus my attention on studying how digital games can be designed to convey meaning and how affordances of the game invite specific players' performances. The objective of this chapter is to answer the third research question of this thesis: *How can persuasive messages be conveyed through digital games?* This is a necessary step to understanding how digital games can be used to convey advertising messages. In this chapter I propose a new theoretical model for the study of how persuasive messages can be conveyed through digital games. A theoretical model aims "to make visible the invisible structure that orders and confers intelligibility" (Elsaesser & Buckland, 2002, p. 5) upon the phenomena that it is trying to explain. The objective of developing this new theoretical model is to make visible how persuasiveness can be structured within digital games and to help identify specific aspects of persuasive games that might not be obvious to the naked eye, by giving them order and intelligibility. This model may facilitate the study and

implementation of persuasive strategies within advergames from a new and specific perspective.

In order to understand how digital games can be designed to convey meaning I rely on game scholars Salen and Zimmerman's (2004) statements that refer to semiotic principles to explain how digital games convey meaning. Salen and Zimmerman explain that players create 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). In this chapter, I build upon Salen and Zimmerman's statements to claim that persuasiveness can be implemented within digital games by making use of three persuasive levels: (1) the signs embedded within the game, (2) the system that allows players to interact with the signs of the game and (3) the context in which games are played. In this new theoretical model I identify all the persuasive dimensions that can be used within digital games and explain how these persuasive dimensions are structured according to the three levels of persuasion.

In the first main section of this chapter I defend my decision to work with a theoretical model (section 3.1.). Furthermore, I discuss three characteristics that identify theoretical models and describe the theoretical model proposed in this thesis according to these three characteristics. The second section main section of this chapter is focused on describing in detail how each persuasive dimension considered in the theoretical model can be used within advergames to persuade players (section 3.2.).

3.1. A Theoretical Model for the Study of Persuasive Communication through Digital Games

In this section I focus my attention on describing a theoretical model for the study of how persuasive messages can be conveyed through digital games. It is divided into two parts. In the first part I justify the reasons why I have chosen to work with a theoretical model (section 3.1.1.). In the second part I describe the three characteristics that define these theoretical models and present the new theoretical model as well as a visual representation of it (section 3.1.2.).

3.1.1. Why a theoretical Model?

What differentiates a theoretical model from a theory is not its function but the way it fulfills the function it is built for (Filloy, Puig, & Rojano, 2008, p. 32). Theoretical models provide explanations "based on assumptions that can be simplified," and this is what differentiates them from theories (Filloy et al., 2008, p. 32). In this case I use a theoretical model for the purpose of explaining how persuasive messages can be conveyed through digital games (Filloy et al., 2008, p. 32). Although models are theoretical, they need experiments to demonstrate their validity and to prove their capacity to provide 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). It follows that theories are considered more accurate than theoretical models (Filloy et al., 2008, p. 32).

Yet a theoretical model has other advantages. The reason why I choose to work on a theoretical model is because models are proposed with the intention of being used for specific purposes usually related to the understanding of the structure of the object of study (Filloy et al., 2008, p. 30). This also makes theoretical models different from theories because proposing a model "is equivalent to suggesting it as a representation that provides at least some approximation to the real situation; furthermore, it means admitting the possibility of alternative representations that may be useful for different purposes" (2008, p. 30). In this study I do not aim to produce a conclusive, all-encompassing theory of advergames' persuasiveness, but, based on an interdisciplinary theoretical framework and using the theoretical model presented here, I aim to structure important theories from different fields and make them comprehensible in a model that can be useful for a better understanding of how persuasive messages can be conveyed through digital games.

3.1.2. How can a theoretical model be described?

Theoretical models can be described according to three characteristics (Filloy et al., 2008, p. 30): (1) they are "proposed as a way of representing the structure of an object or system for certain purposes"

(2008, p. 30); (2) they should "consist of a set of assumptions about some concept or system" (2008, p. 30); and (3) they are "formulated with the aim of providing structural analysis" (2008, p. 30). In what follows I discuss each of the three characteristics that identify theoretical models and describe how the theoretical model proposed will apply to each of them.

The Purposes

The first characteristic that identifies theoretical models is that they are "proposed as a way of representing the structure of an object or system for certain purposes" (Filloy et al., 2008, p. 30). The theoretical model proposed here is designed for the purpose of becoming useful for the study of persuasive communication within digital games but also with the intention of being useful for the integration of persuasive strategies within the design of persuasive games in general and specifically advergames, the object of study of this research.

The value of a theoretical model can be determined by answering two questions: "how well it serves the purposes for which it is employed, and the completeness and accuracy of the representation that it provides" (Filloy et al., 2008, p. 30). In this case, as has been described in detail in the Introduction of this thesis (see p.10 of this thesis), I have measured the value of the theoretical model by using it to conduct in-depth analysis of seven Spanish and Dutch advergames (see Appendix 2). In order to test the validity of the model, the results of these analyses were discussed with the designers of the games. In the interviews conducted with the designers, I explained the problems in the persuasive strategies of the games identified during the analysis and proposed design solutions for those problems. In the seven cases, the analyses served to identify problems and to propose solutions that in the seven cases were evaluated by the interviewees as insightful and valuable contributions in terms of design.

The feedback obtained from the designers about the validity of the results of the analysis was used to improve the theoretical model and helped to construct the version presented in this thesis. The final version of the model was applied to a new in-depth analysis of one of the seven games of the sample. The results of the analysis are presented in the fifth chapter of this thesis to illustrate the validity of the model.

From the results of the explanatory studies described above, it is reasonable to assert that the theoretical model proposed here is useful for the purposes it has been designed for. However, in future studies, this theoretical model should be applied during the design process of a persuasive game in order to conclusively demonstrate its validity during the design process. Due to time limitations, this evaluation has not been undertaken within this project.

The Assumptions

The second characteristic of theoretical models is the fact that they should "consist of a set of assumptions about some concept or system" (2008, p. 30). The theoretical model that I propose here is based on the main assumption that multiple persuasive dimensions can be used within digital games to convey advertising messages (see Chapter 2 of this thesis). This assumption has been justified in detail in the previous chapters of this dissertation and is based on a set of assumptions that have been also discussed in detail above. These assumptions are that: (1) the procedural nature of digital games is not their only characteristic that can be used to convey persuasive messages (see Chapter 2); (2) digital games are also spatial, interactive, encyclopedic, and networked environments, and these characteristics can also be exploited with persuasive intentions (see section 1.1.2.); (3) players' creativity should be taken into consideration when designing persuasive strategies for advergames (see p. 73); (4) players' emotions and beliefs can influence the way players interpret a message conveyed within a persuasive game and therefore should be also taken into consideration (see p. 59); and (5) the context in which persuasive games are played also plays an important role in this equation (see p. 59).

Structure of the Model

The third characteristic of theoretical models is that they are "formulated with the aim of providing structural analysis" (Filloy et al., 2008, p. 30). Accordingly, theoretical models describe the object of study "by attributing to it what might be called an internal structure, a composition or mechanism that, when taken as a reference, will explain various properties of that object or system" (2008, p. 30). In this case, as has been described in detail in the Introduction of this thesis (see p.10 of this thesis), in order to identify how persuasiveness can be

structured within digital games, I have 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 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 to help me continue the process; (4) regrouping and modeling: in this final step I proposed a representative model for the object of study. In this section I present the results of this process in the form of a theoretical model for the study and implementation of persuasive strategies within digital games. In this section I focus on describing the parts into which I have divided the object of study. Later, in the second part of this chapter, I discuss in detail the internal elements of each of the parts described here.

In order to describe the internal persuasive structure of persuasive games I will start by focusing my attention on how digital games convey meaning. There is an open debate about this process, which began in 2011 when the game scholar Miguel Sicart published *Against Procedurality*. In his article Sicart criticizes proceduralists' arguments regarding the rules of the game being responsible for the production of meaning. The author advocates a play-centric approach, stating that the rules of the game are not the responsible for the creation of meaning within the game. Sicart asserts that the "meaning of a game cannot be reduced to its rules, nor to the behaviors derived from the rules, since play will be a process of appropriation of those rules, a dialogue between the system and the player" and therefore, that "the meaning of a game is conveyed in the act of play" (Sicart, 2011, para. 57).

However, I agree with the game scholar Mark J. Nelson when he asserts that "proceduralism and play-centrism debate is too simple" (2012, para. 2). From my point of view the two approaches are complementary, and even additional perspectives should be considered for the understanding of how persuasive games convey meaning. Procedural statements are useful in understanding how meaning can be authored in the rules of the game, but other persuasive dimensions can complement procedural rhetoric in conveying meaning through digital games.

The possibility of conveying meaning through games is not incompatible with players generating new meanings when interacting with the game. Ignoring player creativity and forgetting that player choices can lead to a manipulation of the dominant rhetoric intended by the game designer can result in a distortion of the messages conveyed through digital games. Therefore, I claim that efforts at persuading players through digital games should consist not of conveying closed messages through systems in which players' freedom is limited but in designing games that allow players to generate unrepeatable experiences related to the message that designers want to convey.

Media scholar Joost Raessens (2009) approaches the study of how digital games convey meaning. Raessens uses the concept of *dispositif* as developed within film studies to argue that the process of making meaning within digital games "is really influenced by the ways in which configurations of technology, user positioning, desire, media text, and context take shape in specific games" (2009, p. 507). Following Raessens' arguments, in order to understand how digital games convey meaning, it is important to take also into consideration the context in which games are played, the technology used to play them, and players' attitudes and feelings towards the game.

Taking into consideration all of the above, I claim that the final meaning of a play experience is generated by players while they play a particular digital game in a given context. As I have explained in detail in the Introduction of this thesis (see p. 8) I focus my attention on studying how digital games can be designed to convey persuasive messages, and in particular, to convey advertising messages and how affordances of the game invite specific player performances.

In order to structure all the persuasive dimensions involved in how digital games can be used to convey persuasive messages I rely on game scholars Salen and Zimmerman's (2004) observations. The authors make use of 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 (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: (1) the signs embedded within the game, (2) the system that allows players to interact with the

signs of the game and (3) 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.

First Level of Persuasion: The Signs

Semiotics understands a sign as the whole that results from the association of the signifier, i.e. the form the sign takes, with the signified, i.e. the concept it represents (Saussure, 1983, p. 67). A digital game can contain thousands of individual signs (related in syntax) that can be rendered by making use of one or more modes. The four modes taken into consideration in this thesis are: (1) language, (2) visuals, (3) sound, and (4) haptics.[49] Signs rendered in more than one mode at the same time (which is often the case) are considered multimodal signs. For example, the lyrics of a song constitute multimodal signs, rendered making use of sound and language. The list of modes provided here is not exhaustive or definitive, and other modes can be taken into consideration in the future. However, the possible future modifications in this list do not affect the fundamentals of the theoretical model presented here and substantiate the model further.

I will argue that each of the different modes in which signs can be rendered within digital games can be used to persuade players. Thus, it is possible to find four persuasive dimensions within the first persuasive level of advergames: linguistic persuasion, visual persuasion, sonic persuasion, and haptic persuasion. When I refer to linguistic persuasion, I am focusing my attention on how digital games can communicate meaning through language. It follows that linguistic persuasion is concerned with semantics, i.e. how meaning is inferred from words and concepts (Saeed, 2003, p. 2). I refer, then, to any form of linguistic communication, either written or spoken language. Visual persuasion is concerned with how meaning is inferred from visuals —including here

[49] "This word was introduced at the beginning of the twentieth century by researchers in the field of experimental psychology to refer to the active touch of physical objects by humans. In the late 1980s, the term was redefined to enlarge its scope to include all aspects of machine touch and human–machine touch interaction. The 'touching' of objects could be done by humans, machines, or a combination of both, and the environment can be real, virtual, or a combination of both" (El Saddik, Orozco, Eid, & Cha, 2011, p. 3).

the visual treatment of written language; sonic persuasion is concerned with how meaning is inferred from sound—including here music, noise and silence; and haptic persuasion is concerned with how meaning is inferred from nonverbal communication involving touch. All this persuasive dimensions will be discussed in detail in the second part of this chapter.

In the cases in which more than one mode is used to render one sign, I will be talking about multimodal signs. In multimodal signs, different persuasive dimensions are used at the same time to convey meaning. The study of the meaning conveyed through each of the persuasive dimensions helps to better understand how persuasive communication can be implemented within digital games.

Second Level of Persuasion: The System

Signs need to be interpreted by players in order to become meaningful. However, signs do not function through their intrinsic value but through their position relative to other signs (Saussure, 1983, p. 177). Therefore, in order to become meaningful, signs need a system that establishes relationships between them. The rules of the game have an important role in establishing relationships between the signs within digital games, as they are the responsible for guiding players through the game. However, despite Salen and Zimmerman's statement that relationships between signs in digital games are established only by the rules of the game (2004, p. 364), I claim, as will be further explained in the next section, that there are other two aspects of digital games that establish relationships between signs as well: the narrative and the cinematic treatment of the audiovisual contents. Therefore, I state that it is possible to find three persuasive dimensions in the second level of persuasion: procedural persuasion, narrative persuasion and cinematic persuasion.

Procedural persuasion is concerned with how meaning can be inferred from the rules of the game. Taking into consideration the interactive nature of digital games, procedural persuasion is also related to the meaning created by players' performance in the game, which will generate in each game session unrepeatable relationships between signs of the first level of persuasion. Therefore, it is not only that the rules of the game can be interpreted by the players, but, as part of an interactive

system, the procedures have a role in the process of the interpretation of what players see, hear, read and feel.

Following the same reasoning, narrative persuasion is concerned with how meaning can be inferred from the narrative of the game and also, as part of an interactive system, has a role in the process of the interpretation of what players see, hear, read and feel. Finally, cinematic persuasion is concerned with how meaning can be inferred from the cinematic treatment of the audiovisual contents of the game and also has a role in the process of the interpretation of what players see, hear, read and feel.

Third Level of Persuasion: The Context

Previously, I have stated that signs need to be interpreted by players in order to become meaningful. It follows that, in order to interpret the signs of a digital game, a player needs to play it. Consequently, the meaning of a digital game emerges only when the player interacts with the signs of the system within a specific context. Following this reasoning, it can be established that the context can affect the way the player interprets the signs. Furthermore, according to Salen and Zimmerman, the context can influence this interpretation by enhancing, distorting or even radically altering the intended meaning (Salen & Zimmerman, 2004, p. 364). This is because players tend to interpret signs not for what they are but what they mean to them in certain contexts (Walz, 2003, p. 196). Consequently, players' interpretation of messages embedded within digital games can be influenced by the personal circumstances and beliefs players bring to the game.

However, as will be explained in detail in section 3.2.3., the game also has the capacity to influence players' interpretation by the use of metacommunication (Bateson, 2006, p. 315). In this context, metacommunication is understood as the capacity of digital games to influence players' attitudes through the feelings or emotions aroused by the game. Therefore, advergames have the capacity to influence the perceptions and beliefs of the player not only in the game world but also in the physical world context that it intersects.

Marketing scholar Bernd Schmitt (2000) studied how irrational and emotional aspects involved in a purchasing decision have the same importance as the rational and logical elements on which marketing has been traditionally focused. According to Schmitt (2000, p. 6) persuasive

campaigns can be designed to influence targets' attitudes, perceptions and beliefs by providing experiences focused on the irrational and emotional aspects involved in decision-making. Following Schmitt's statements, I claim, as will be further explained in section 3.2.3., that players' attitudes, perceptions and beliefs can be influenced by digital games (1) by arousing sensory experiences, (2) by arousing emotions, (3) by delivering intellectual challenges that engage players through surprise, intrigue and provocation, and/or (4) by encouraging players to establish relationships with other players. Therefore, I state that it is possible to find four persuasive dimensions in the third level of persuasion: sensorial persuasion, affective persuasion, tactical persuasion and social persuasion.

Sensorial persuasion is aimed at the five individual senses —sight, hearing, taste, smell and touch— with the objective of triggering sensory experiences. The affective persuasive dimension stirs up the player's deeper feelings and emotions with the objective of triggering affective experiences that go from slightly positive feelings to strong emotions (Schmitt, 2000, p. 6). Tactical persuasion aims to provide appealing experiences for creative customers by delivering intellectual challenges that engage them through surprise, intrigue and provocation (2000, p. 6). This persuasive dimension is directly related to tactical involvement, which is described by the game scholar Gordon Calleja as the pleasure aroused by planning the strategies to follow in the game (2007, p. 89). Finally, social persuasion aims to influence players' attitudes by delivering experiences focused on encouraging players to establish relationships with other people or with the brand.

To sum up, in the previous sections I have argued that persuasiveness can be structured within digital games by making use of eleven persuasive dimensions distributed through three levels of persuasion. All these persuasive dimensions, the way they are structured and the forms in which they can be used to persuade players, constitute a theoretical model that can be used for the study and/or implementation of persuasive strategies within advergames. It must be noted, however, that when playing persuasive games, players are not persuaded by each of these dimensions in isolation but by the relationships between all of them. Furthermore, the fact that persuasive games can make use of eleven persuasive dimensions does not mean that all persuasive games

need to contain all of them in order to be effective. The pertinence of the use of each of the persuasive dimensions will depend on a series of factors. The specific factors that should guide the study or implementation of persuasive strategies within advergames will be identified and described in the next chapter of this thesis.

Visual Representation of the Model

In order to facilitate the analysis and implementation of persuasive messages within advergames, I propose to represent this theoretical model by making use of a visual diagram (see Figure 2). Once the theoretical model is understood, the visual diagram can serve to quickly guide both the study and design of persuasive structures of advergames. Furthermore, the visual diagram can also provide information about the persuasive structures of advergames that can be immediately understood by others who also understand the diagram.

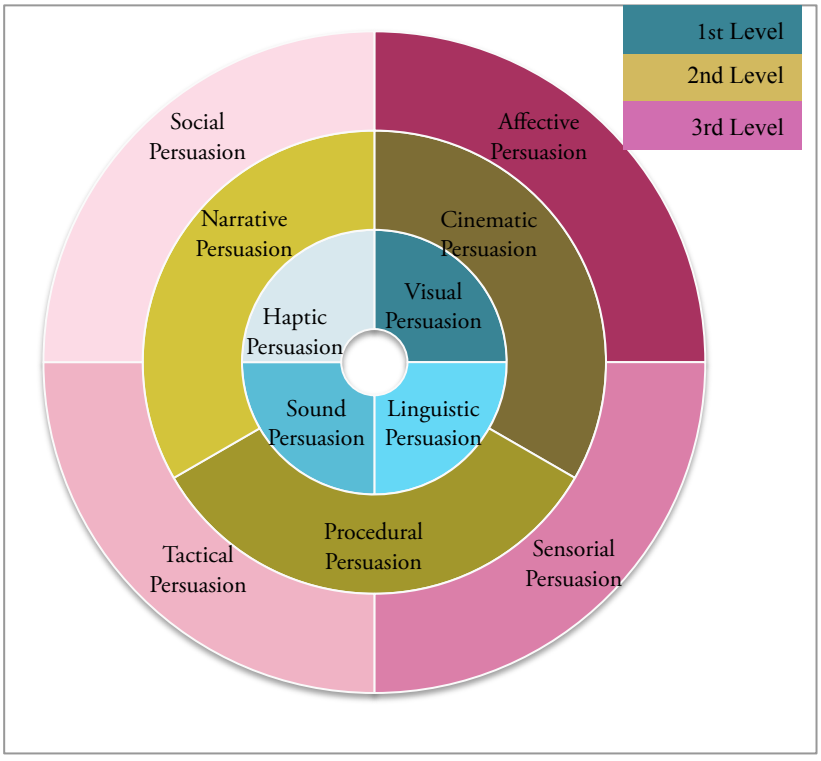


Figure 2. Visual Representation of the Theoretical Model

The diagram consists of three concentric rings that correspond to three levels of persuasion. The center ring corresponds to the first level of persuasion and, consequently, holds the persuasive dimensions that are related to the signs of the game. These are linguistic persuasion, visual persuasion, sonic persuasion and haptic persuasion. Secondly, the middle ring of the diagram corresponds to the second level of persuasion and, consequently, holds the persuasive dimensions that are related to the system.

These are procedural persuasion, narrative persuasion and cinematic persuasion. Finally, the outer ring of the diagram corresponds to the third level of persuasion and, consequently, holds the persuasive dimensions that are related to the context, namely, sensorial persuasion, affective persuasion, tactical persuasion and social persuasion.

3.2. Persuasive Dimensions in Advergames

Now that I have explained how persuasive communication can be structured within digital games, I am going to focus my attention on describing in detail each of the persuasive dimensions can be used within advergames to convey advertising messages. Furthermore, I identify and describe internal elements of each of these persuasive dimensions and illustrate, making use of examples, how they can be used to persuade players. I also highlight the most significant ways in which each of these persuasive dimensions can be used within advergames to persuade players and illustrate these uses with examples.[50] Again, I would like to remind the reader that I have identified these elements by making use of theoretical and methodological triangulation techniques. The content analysis of fifty-eight advergames that have been analyzed for this purpose has been of special relevance for the identification of the internal elements of each of the persuasive dimensions described below.

[50] It is beyond of the scope of this thesis to make a detailed list of all the persuasive possibilities of each of the persuasive dimensions. This is a task that exceeds the possibilities of this research due to the multiple persuasive techniques that can be deployed within advergames.

3.2.1. Linguistic Persuasion

When I refer to linguistic persuasion I am focusing my attention on how advergames can communicate meaning through pieces of language. Linguistic persuasion can be used within advergames in at least: the name of the game, instructional texts, narrative texts, interface commands, character dialogue, character names, names of objects and names of spatial locations.

Linguistic persuasion is concerned with semantics, i.e. how meaning is inferred from words and concepts (Saeed, 2003, p. 2) including in both spoken or written language. Again, I would like to remind the reader that signs whose interpretation can be influenced by more than one persuasive dimension are considered here multimodal signs. Those signs can be analyzed according to each of the persuasive dimensions that have any influence on their interpretation.

As signs, words in the form of nouns, pronouns or adjectives can represent concrete or abstract objects, physical or mental actions, or qualities (which may be called attributes, properties or features). According to the communication scholar Arthur A. Berger, linguistic signs can be used not only to convey information through their denotative meaning, i.e. their literal or explicit meaning, but also can be used to manipulate how meaning is interpreted through their connotative meaning, i.e. the cultural meanings that become attached to them (2004, p. 16). In this respect, the linguistic Robert A. Hipkiss points out that when using language with persuasive intentions it is also important to consider how the context can evoke different responses in those who hear or read the texts (Hipkiss, 1995, Introduction ix).

The study of how language can be used with persuasive intentions began in Ancient Greece and has been a touchstone for rhetorical argumentation ever since. Classical philosophers Plato and Aristotle framed rhetoric as a technique for oral persuasion. Aristotle's treatise on rhetoric (1984) claimed that a speaker supports the probability of a message by logical, ethical and emotional proofs. He states that persuasion through discourse is influenced not only by elements of style and delivery but also by the use of reasoning to construct arguments (logos), by emotional appeals made within the discourse (pathos), and by the credibility and the character of the speaker (ethos) (Aristotle, 1984, p. 104).

Arguments can be constructed within advergames by making use of inductive or deductive reasoning. Inductive reasoning uses examples to draw conclusions while deductive reasoning uses generally accepted propositions to derive specific conclusions. Arguments can be used within advergames to introduce products' benefits and to increase advergames' credibility. However, the use of argumentation in linguistic persuasion within advergames may result in players' resistance to persuasive communication. Therefore, argumentation should be properly integrated into the gameplay to overcome resistance.

An example of a clever use of argumentation within an advergame can be found in the game *Packing Battle* (Symbio Digital, 2013), a viral campaign released by a travel insurance company. In the game, players have to control a tourist and help him to collect articles to pack his suitcase and avoid obstacles that can ruin his trip. The tourist's belongings are represented in the game by transparent balls that players have to collect, and obstacles are represented by red balls that players have to avoid. Players also have the possibility to collect a blue ball that is a 'power-up', protecting the tourist against obstacles. When the power-up is activated, even if the player collects one of the red balls, the tourist is not affected by its negative effects. In the game, the blue ball represents travel insurance.

When the first blue ball appears for the first time, a text linked to it appears that says: "Travel insurance protects you". The red balls are accompanied by texts related to typical problems that tourists can experience when traveling, such as losing luggage. With these texts players understand that collecting the blue ball allows them to be protected from the negative effects of the red balls. Players can rapidly link the power the blue ball has in the game with the benefits travel insurance can have in their life. This association can be made thanks to linguistic persuasion, which helps to link the rules of the game and the visual design of the insurance and the obstacles with the advertising message conveyed within the game. Without linguistic persuasion, this association would never be made.

Furthermore, it is important to highlight that the text that emerges when the blue ball appears for the first time is not only an instructional text but is also an argument. If we analyze it in the context of the game, it can be considered an instructional text because it indicates to the player what the blue ball is for. However, if the text is analyzed in

isolation, we can see that it is also an argument that can be directly linked to the benefits of the advertised product. Since the argument is properly integrated into the gameplay, players may have their guard down against persuasive communication.



Figure 3. Linguistic Persuasion in *Packing Battle* (Symbio Digital, 2013).

In order to evoke strong emotions in players, linguistic persuasion within advergames can make use of figures of speech. These are words or phrases with a connotative meaning. Schemes are figures of speech that deal with word order while tropes are figures of speech that deal with the meaning of words. The use of figures of speech with persuasive intentions has been extensively studied by other scholars (see Quinn, 2010) and it is beyond the scope of this thesis to undertake an in-depth analysis of their uses within advergames. However, metaphor and metonymy are the most-recurrent tropes in advertising. A metaphor is a figure of speech that transfers the meaning of one word to another (Volkmann, 2006, p. 3), while metonymy consists of referring "to an entity by the name of an attribute, or of an entity semantically related to it" (Cook, 1996, p. 50). In addition, strong emotions can be also evoked by linguistic persuasion by making use of storytelling (see p. 120 of this thesis).

In the advergame *Wilkinson Fight for Kisses* (Gauche, 2007) linguistic persuasion is used to construct a metaphor which helps to integrate the

advertising message into the game. The advergame, launched to advertise the men's razor Wilkinson 4 Titanium, is presented as a war between a baby and a father for the mother's kisses. In the game, the player is responsible for controlling one of the two in a three-round tournament. In this case, linguistic persuasion is used at the beginning of the game to construct a metaphor linking this virtual battle with the advertising message, which is that the razor leaves men's skin really soft. The text that is presented at the beginning of the game compares the razor with a weapon that can be used by men to compete against babies' soft skin, to get back mothers' attention. The textual presentation concludes that thanks to Wilkinson, men can fight on equal terms against babies for mothers' attention. This linguistic metaphor serves to introduce the game and make it meaningful from the brand's perspective.

The effectiveness of linguistic persuasion within advergames can also be influenced by the character of the speaker, if it is introduced in the form of spoken language. This strategy was followed in the advergame *Secret Ingredient* (UNIT9, 2010) commissioned by Heinz and designed with the objective of increasing the use of Heinz Tomato Ketchup as a cooking ingredient. The strategy of the advergame was focused on communicating the benefits of using the ketchup for classic homemade dishes. The advergame challenges players to discover the "secret ingredient" in classic homemade favorites. In order to increase the effectiveness of the arguments used to persuade players, the online game gives them the chance to cook with celebrity chef Paul Rankin, who demonstrates how to cook perfect recipes with Heinz Tomato Ketchup and uses linguistic persuasion to convince players about the benefits of this ingredient. In this case, the use of a renowned celebrity to persuade players through linguistic persuasion confers credibility to the arguments conveyed within the game.

Codes can also be used to define the style in which texts are presented to players, thus influencing their interpretation. A code is a collection of rules for all members of a given society and culture (Berger, 2004, p. 32). Codes are especially useful because they are concrete and comprehensive but at the same time difficult to see because of their pervasiveness. All media deploy codes that users know how to interpret due to their previous experiences. In the introduction of written texts in advergames, written codes can be used to guide players' attention,

apportioning particular relevance to some texts over others or to linguistic signs over other types of signs present on the screen.

Written-language codes include the use of headings and subheadings, subtitles, logos, labels, font, placement and/or size of texts (Berger, 2004, p. 32). Spoken-language codes are related to three main elements: intonation, pitch, pacing and timbre. Intonation refers to the rise and fall of the voice of the speaker, which has the potential to engage and hold listeners or make them tune out. Pitch is related to how high or low the speaker's voice sounds. Pace refers to the speed and tempo of speakers' speech (Gabrielsen & Juul Christiansen, 2010, p. 173). And timbre refers to the "own personal vibration" of a voice that differentiates it from other voices (Chion, 1994, p. 31).

An example which uses both written and spoken language codes to persuade users is the advergame *Mentos Kiss Fight* (BBH & Kingdom, 2008). The game, released by the candy brand Mentos, uses humorous references to classic beat 'em up games and consists of a three-level tournament, wrapped up by a short video with live-action storytelling. In the game, instead of inflicting pain on their opponents, players need to give them pleasure by kissing them into submission. The advergame includes advanced moves with special effects that are triggered by taking different Mentos' products. In the moment in which the player collects one of Mentos' products, the game stops momentarily, showing the logo of the brand accompanied by a voiceover announcing the name of the product collected, for example, as "Mentos Mint". The logo is shown in a very big size in the center of the screen, and its presence is enhanced by the use of a background glow. Furthermore, the name of the brand is pronounced by a low voice, thereby using a special intonation that gives relevance to the name heard by the player. In addition, the voiceover makes a small pause between the name of the brand "Mentos" and the rest of the name of the product, which in this example is "Mint". In this way the emphasis is put on the name of the brand, which sounds the same no matter which product is collected. This serves to present the logo and the name of the brand redundantly in the game. Moreover, when the logo shown on the screen is accompanied by the voiceover, players are being informed that they have just collected an item that allows them to perform an advanced move. Therefore, players link this moment to the positive feeling of having a power-up in the game. It follows that linguistic signs are meaningful not only from the brand's

perspective but are also meaningful for the player in the game. This means that the player does not perceive them as intrusive persuasive communication but as elements of the gameplay, which helps to reduce players' resistance to persuasive communication.

In summary, linguistic persuasion within advergames can be used to construct arguments or to evoke strong emotions in players, making use of denotation or connotation. The effectiveness of linguistic persuasion depends on a series of factors that include the codes used to deliver the message and the character of the speaker. Furthermore, linguistic persuasion can be used in relation to other signs to guide players' interpretation or to convey more complex messages. It follows that the context in which linguistic persuasion is delivered can influence the interpretation of the message conveyed.

3.2.2. Visual Persuasion

When I refer to visual persuasion I am focusing on how advergames can communicate meaning with visuals within advergames. The philosopher Kenneth Burke (1987-1993) was the first to acknowledge the persuasive potential of nonverbal domains. "Wherever there is persuasion," he wrote, "there is rhetoric. And wherever there is 'meaning,' there is 'persuasion.'" (Burke, 1969, p. 172). The work of Burke gave rise to the study of persuasiveness in other domains, increasing interest in visual rhetoric, which is understood as the art of using imagery and visual representation persuasively.

Numerous scholars have studied how visual persuasion can work in media other than digital games (e.g. Barthes, 1977; Forceville, 1996; Kennedy, 1982; Whittock). Drawing upon such studies I assume that it is possible to consider that the visual patterns identified by these scholars can be applied within advergames to persuade players. I perceive visual persuasion as characterized by a process in which the visuals function as cues that evoke intended meanings, premises and lines of reasoning.

Media scholar Jens E. Kjeldsen states that visual persuasion may draw upon four persuasive qualities of visuals (2012, pp. 240-241): presence, realism, immediacy and semantic condensation. Presence is the capacity of visuals to make present to players something that is useful to support advertising claims. Realism is the capacity of visuals to

present something "as though it is reality itself". Immediacy is the property of visuals to be perceived and understood in a brief instant. Finally, semantic condensation is the capacity of visuals to condense several ideas, thoughts or contents into a single image. It follows that these four persuasive qualities might be used within advergames to persuade players.

However, visuals within advergames can become polysemous, thus implying "subjacent to its signifiers, a 'floating chain' of signifiers of which the reader can select some and ignore the rest" (Barthes, 1977, p. 28). Therefore, players may need certain directions to be able to interpret the intended meaning. Players' interpretation can be guided by the use of codes that users understand from their previous experiences. Although concrete and comprehensive, codes are at the same time difficult to see because of their pervasiveness. In this sense, the manipulation of lightning, color and perspective play important roles in persuading players through visuals.

I have identified that visual persuasion can be used within advergames in: (1) interface design (including the design of splash and menu screens), (2) character design, (3) objects design, and (4) spatial design. An example of visual persuasion executed in the design of the interface can be found in the advergame *The Naughty Christmas* (Isobar France, Fighting Fish, & CRCR, 2012), commissioned by the fashion designer Jean Paul Gaultier and launched at Christmas time. The interface design of the advergame is an advent calendar that players can use to access mini-games by clicking on one of the days of the calendar. The design features Jean Paul Gaultier who wears an open coat with multiple pockets and each day of the calendar is placed in one of these pockets. Although Jean Paul Gaultier is dressed in the design, the player immediately links the image with the typical image of an exhibitionist flashing open his coat to a stranger (see Figure 4). The connotative meaning of the image enables players to build a metaphor[51] that guides their interpretation and make them understand that the game might be related to naughty content, as also suggested by the title of the game. Moreover, in the image Gaultier raises one of his eyebrows when he smiles, which culturally can be interpreted as a sign of flirting. As a

[51] A metaphor is a rhetorical figure that describes an object and is used in a place of another object to suggest an analogy between them (Nöth, 1995, p. 128).

designer, Gaultier has always questioned established conventions, and in this advergame the designer follows the same path, relating Christmas to naughtiness.

An example of visual persuasion executed through the design of a character can be found in the advergame *Banana Boogie Battle* (Group, 2010), which features a Chiquita banana battling against a 'regular' banana. In this case, the visual representation of the two bananas tries to convey to players the message that Chiquita bananas are of better quality than 'regular' bananas. For that purpose, the Chiquita banana is represented as a 'perfect banana', featuring a uniform yellow color and a smiley face that resembles Chiquita's logo. The 'regular' banana, on the other hand, is pale yellow with brown spots, resembling an overripe banana, and has a scowling face. The comparison between the two representations communicates that the Chiquita banana is the better of the two.



Figure 4. Interface design of *The Naughty Christmas* (Isobar France et al., 2012).



Figure 5. Character design of the Chiquita banana in *Banana Boogie Battle* (Group, 2010).

The advergame *Harald Hardtooth and The Fight Of The Clean Teeth* (Colgate-Palmolive, 1992) is an example of visual persuasion executed through the design of an object. The game consists of a battle in which the main character, Harald Hardtooth, fights against bacteria. In this battle Harald holds a toothpaste tube as if it were a gun and uses it to kill bacteria (see Figure 6). The visual representation of the tube, its position and how is it held by Harald, added to the use he makes of it, help players to construct a metaphor identifying toothpaste as a 'gun' to fight against bacteria. From this metaphor players can infer that the use of Colgate toothpaste can prevent the growth of bacteria.

The advergame *Nespresso Variations* (Soleil Noir & Chez Eddy 2010) is an example of visual persuasion executed through space design. The experience in the advergame is totally focused on conveying that drinking one of the new Nespresso coffee variations is like being transported to a very pleasant world. In the advergame the metaphor of heaven is used to convey a very pleasant world. Traditionally heaven can be represented by a blue sky full of white and fluffy clouds. Therefore, the game space, which is a blue sky with fluffy clouds, enables players to interpret that drinking a cup of one of Nespresso's new coffee variations is like being transported to heaven. It follows that the visual design of the advergame space has an important role in forming players' interpretation of the advertising message.

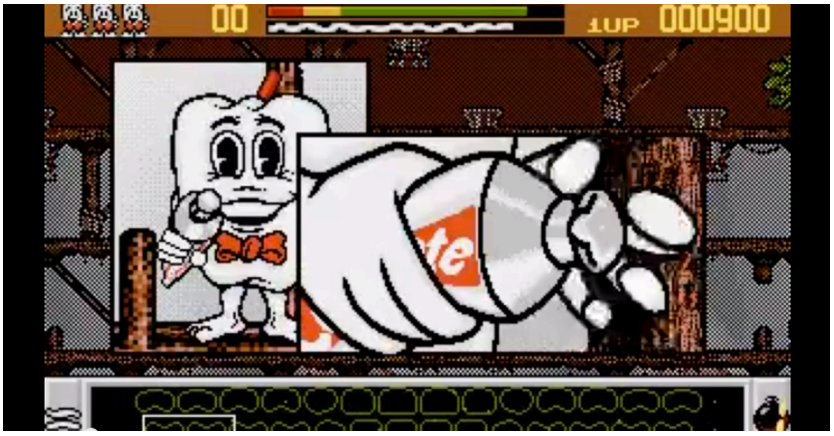


Figure 6. Visual metaphor in which the toothpaste tube is represented as a gun in *Harald Hardtooth and The Fight Of The Clean Teeth* (Colgate-Palmolive, 1992)

It can be concluded that visual persuasion can be useful within advergames to convey advertising messages. Furthermore, visual persuasion can be executed in many different elements of game design. However, it must be taken into consideration that in some cases players may need certain directions to be able to interpret the meaning intended by visuals within the game.

3.2.3. Sonic Persuasion

When I refer to sonic persuasion I am focusing my attention on how advergames can communicate meaning through the selection, generation, recording, distortion, amplification and mixing of sounds. The types of sound considered in this section are music, noise and silence. The sonic treatment of the linguistic sound[52] will also be considered, but the content will not be analyzed under this domain. The use of these four types of sounds can have an expressive function in digital games that can be analyzed in terms of persuasion.

In order to understand how sonic persuasion works within advergames it is important to comprehend how players listen to sounds,

[52] The lyrics of music are considered part of the linguistic sound.

and how interaction can influence how players interpret them. The game scholar Karen Collins, specialized in the study of game sound, explains that listening to sounds consists not only of hearing them but also of consciously focusing on them (2013, p. 4). In this respect, the theoretician of audio-visual relationships Michael Chion (1994) states that players can gather information from sounds that they hear by casual listening and reduced listening. Casual listening refers to "the act of focusing on or recognizing the cause or source of the sound" (Chion, 1994, p. 28). From listening to sounds, players can recognize where they come from or what type of object is making them, for example. On the other hand, reduced listening is the capacity of players to gather information from the traits of the sound, such as its quality or its timbre (1994, p. 28).

The information gathered by players through casual and reduced listening may be interpreted by semantic listening (Chion, 1994, p. 28). Therefore, semantic listening is the ability of players to interpret a message in a sound by listening to it. It follows that by taking advantage of players' abilities to gather and interpret information from sounds, advergames can persuade players through sonic persuasion.

It is also important to note that, due to the interactive nature of advergames, the way players trigger sound events in the game depends on their performance. In this regard, sonic persuasion should consider the expressive capacity of interactive audio and adaptive audio identified by Collins. Interactive audio groups those sound events that are the result of a player's direct input, while adaptive audio groups those sound events that are introduced by reacting to different game states (Collins, 2008, p. 4).

I have identified that sonic persuasion can be used within advergames in at least: (1) interface sounds, (2) sound effects, and (3) ambient sound beds. An example of sonic persuasion used in the sounds associated with the interface can be found in the advergame *Customize* (Vitaliy Onishenko & Oleg Kostyuk, 2010) from the costume brand of the same name. The game was designed to advertise a Halloween custom line from the brand and consists of a hidden object mechanics in which the player needs to look for hidden pumpkins. The interface design includes a visual representation of several characters dressed in the brand's costumes. When players roll the mouse over these characters looking for the hidden objects, they can hear a special sound,

and at the same time the interface displays a button that enables the players to access to a new window. The sound helps to drive players' attention towards the characters and arouses their curiosity about the content of the new window. The new window shows detailed information about the costume the character is wearing and allows the players to buy it. Therefore, in this case sonic persuasion makes use of interactive audio to encourage the players to visit the purchasing site.

An example of sonic persuasion through sound effects in an advergame can be found in *Honda Grrr* (UNIT9, 2005). The game was designed to promote the car model Accord i-CDTi, and its advertising message was focused on conveying that the engine of the car is environmentally friendly. In the game, the player is responsible for guiding a rabbit and helping it to find and destroy objects responsible for pollution (see Figure 7). This action is a metaphor that tries to compare the use of the car with a good action for the environment. Every time the rabbit destroys an object, a jingle of the campaign is heard, indicating to players that they have done a good action. In this case sonic persuasion makes use of interactive audio, rewarding an action undertaken by the player with a pleasant sound. The fact that the sound is associated with the players' action makes it more meaningful for them. Such a strategy therefore enables semantic listening, facilitating players' interpretation of the advertising message. Furthermore, this strategy also relies on redundancy because this sound is heard every time the player finds and destroys one of the objects, thereby facilitating familiarity and recall.



Figure 7. *Honda Grrr* (UNIT9, 2005).

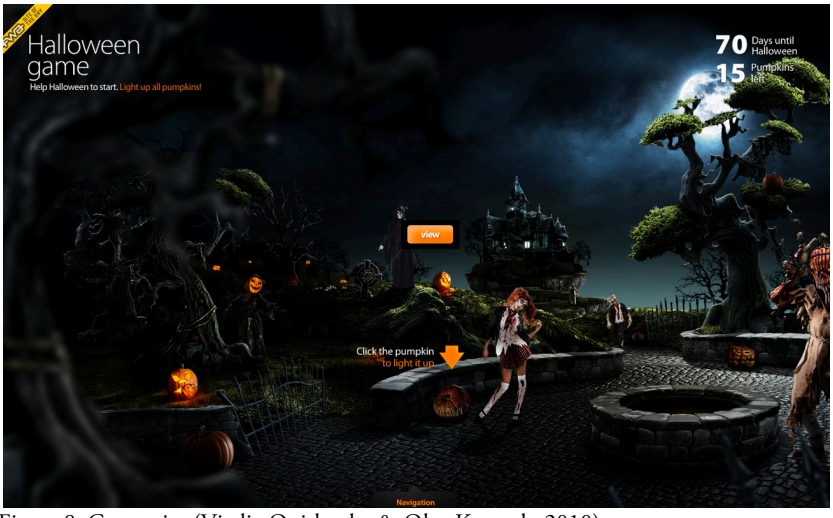


Figure 8. Customize (Vitaliy Onishenko & Oleg Kostyuk, 2010).

An example of sonic persuasion executed within an ambient sound bed can be found in the advergame *Swedish Armed Forces Recruit #1* (DDB Stockholm & ACNE Production, 2008). The advergame was commissioned by the Swedish Armed Forces with the intention of recruiting soldiers. Given that purpose, the game makes players face a recruitment test which evaluates their abilities to become soldiers. The test consists of a series of challenges that evaluate skills that players would need if they decide to join the army. The game tries to give

people who might question whether they can become competent soldiers a tool with which to evaluate their capacity. If they are able to succeed in this challenge, their interest in joining the army may increase. Following a successful outcome, the game offers players the possibility of applying for a position. In this case, the game uses sonic persuasion by creating an ambient sound bed that resembles the one that players could expect from a physical army testing room. The ambient sound bed uses expressive silences instead of music. Furthermore, the sounds heard by players, such as a door closing and a voiceover, are treated with echoes and reverbs to create a realistic atmosphere. The game encourages players to use headphones to increase the effect of sonic persuasion. In this case, the realistic treatment of the sound aims to influence the way players feel the experience, to make them imagine themselves actually trying to join the army. Players might link the feelings and emotions experienced during the test to the physical world. This can increase their willingness to join the army or at least arouse curiosity about such a career.

There is another way to integrate sound with persuasive intentions within advergames when the sound itself is what the game is trying to advertise. For instance, a band may use an advergame to advertise the launch of a new album. In this case, the designer should think about the way to focus players' attention on the music, to enable casual listening. There are many possibilities to do this, and all the aforementioned techniques can be useful. The electronic band Spleen United, for example, created a puzzle advergame *Sunset to Sunset* (hello monday, 2010) in which the pieces to the puzzle are sounds. Each sound corresponds to a piece of a song, and in order to solve the puzzle the player needs to play the sounds in the right order. With this strategy game designers give players a reason to interact with the band's music, and this interaction undoubtedly makes them completely focus on the sound. Thus the sound becomes meaningful to players in the game.

In conclusion, the persuasive potential of sounds within digital games is especially interesting due to their capacity to be associated with the players' performance. This enables the possibility to drive players' attention towards auditory elements, which become meaningful to the player, facilitating semantic listening.

3.2.4. Haptic Persuasion

When I refer to haptic persuasion I am focusing my attention on how advergames can communicate meaning with any form of nonverbal communication involving touch, which is perceived only when it is directly experienced. Haptic persuasion deals with how players construct meaning through their bodily and mental performance, which may generate new signs or modify existing ones (Frasca, 2007, p. 198). Therefore, it is directly related to interactive activities in games.

The possibilities for haptic persuasion have substantially increased thanks to the evolution of technology. The incorporation of haptic and sensing technologies in the screens of devices such as smartphones, tablets or consoles has changed the way players interact with games, opening a new domain for persuasion. These technologies have facilitated the introduction of haptic interfaces, devices that allow users to "interact with a computer by receiving tactile and force feedback" (Orozco, Silva, El Saddik, & Petriu, 2012, p. 217). Multimedia communication scholars Orozco, Silva, El Saddik and Petriu, who have conducted several studies on game haptics, state that the use of haptics within digital games "enhances the game experience by creating a more realistic physical feeling of playing a game" (2012, p. 218).

In his Ph.D. dissertation *Play the Message. Play, Game and Videogame Rhetoric* (2007), game scholar Gonzalo Frasca explores how the haptic system is involved in the creation and interpretation of meaning within play activities. The author states that "forcing the player to exaggerate his physical performance is the equivalent of a rhetorical figure" on the haptic level (2007, p. 150).

However, the persuasive potential of haptics resides not only in the way the game accepts input from the player but also how the system provides tactile output. The feedback that we obtain from computer games as well as from our interaction with the physical world is essential to understand the consequences and validity of our actions in the environment we are interacting with. Accordingly, digital media scholars Martin Faust and Yong-Ho Yoo state that haptic interaction is "among the fundamental ways in which humans understand the world and effect changes in it" (Faust & Yoo, 2006, p. 1). For this reason, the authors consider that haptic feedback offers "an advanced interaction concept for games" (2006, p. 1).

It follows that haptic persuasion within digital games should be designed according to the physical aspect of the game and how the players can give haptic input and receive haptic feedback. Haptic feedback can be provided by the use of "force/tactile feedback, pressure, vibration, heat, and even pain" (Park, Kim, Cho, & Park, 2010, p. 389). The human-computer interaction engineer Grigore C. Burdea has studied how tactile and force feedback techniques can be used to give feedback about the "weight, surface smoothness, compliance or temperature" (1996, p. 1) of grasped objects in virtual worlds. The author defines tactile feedback as a "sensation applied to the skin, typically in response to contact or other actions in a virtual world" (Burdea, 1996, p. 3). On the other hand, he defines force feedback as the "the sensation of weight or resistance in a virtual world" (Burdea, 1996, p. 4). Burdea explains that tactile feedback can be used, for example, to provide sensations that give information about a specific condition of an object grasped in a virtual world (1996, p. 4). Furthermore, tactile feedback can also be used to produce symbols, such as with the use of Braille language. Meanwhile, force feedback can be used to allow players to "feel the weight of virtual objects or the resistance to motion that they can create" (Burdea, 1996, p. 4).

The possibilities to implement haptic persuasion depend on where and how interaction is taking place. In digital games in which players use controllers such as joysticks, game pads, haptic vests and jackets or wheels, haptic persuasion can be implemented depending on the different types of haptic feedback that these controllers can provide. Each of these controllers can be specially designed to provide tactile or force feedback in response to interaction. In addition, in pervasive games in which players can interact with the physical world by making use of digital devices, bodily interaction with the physical world opens new possibilities for haptic feedback. Furthermore, motion-sensing input devices such as the Kinect of the Xbox 360, also harbor potential for haptic persuasion.

Although the potential of haptic persuasion is huge, this technique is not widely exploited in the field of advergames due to the high costs of the technology that allows haptic feedback. However, advergames try to take advantage of the potential of haptic persuasion by making use of multimodal feedback. Multimodal feedback combines different channels simultaneously to provide feedback to players' input (Caporusso,

Mkrtchyan, & Badia, 2009, p. 2). In games with limitations in haptic feedback, visuals and sound can be used to provide feedback to haptic input.

Furthermore, the mechanics of the game can be designed to make the game respond to haptic input in a way that generates in the player an illusion of haptic feedback. An example of this can be found in the advergame *Get the Glass!* (North Kingdom, 2007) discussed on p. 33. The game features a challenge in which the player has to help the father of the Adachi family drive a van along a winding road. Through this challenge advertisers want to communicate that the father has difficulties driving the van because his muscles are weakened from a lack of milk consumption. This situation is represented in the game by a delayed response to players' input when they try to control the van in the game. What happens is that there is a delay between the moment the player moves the mouse and the moment in which the game responds to this input. This delay becomes an illusory haptic feedback that can be interpreted by the player as the difficulty the father experiences in moving the van's steering wheel. Therefore, in this case multimodal feedback has been used to replace force feedback with a persuasive purpose.

In other cases, haptic input alone is used within digital games with persuasive intentions. The advergame *Honeyway Train* (Saatchi & Saatchi & Boffswana, 2010) (see Figure 9) is an example of how advergames can use haptic input to persuade players. In this augmented reality advergame the player is encouraged to use a box of Cheerios cereal as a wheel controller. Though the box is not the same as the controller, the fact that the player moves the box to simulate the act of driving in the game is sufficient to make the player connect the box controller to a real wheel controller. In this case Cheerios cereals are a utilitarian product purchased to satisfy a basic need. It is also a low involvement product, and therefore it is likely that players are not going to pay too much attention to advergames' claims, and an experience product, which means that its features can be evaluated only after purchase. In this case it is difficult to think about a game design that can simulate the experience of eating the product. Consequently, the strategy followed was to create a memorable and enjoyable experience in which the product is incorporated through an illustrative function. That is, the product has an important role in the experience, but the player

does not interact with it in its natural context within the game. However, thanks to the augmented reality, this strategy serves to motivate the player to interact with the product outside of the boundaries of the digital game.



Figure 9: Player using a Cheerios cereal box as a wheel controller in *Honeyway Train* (Saatchi & Saatchi & Boffswana, 2010)

In conclusion, the persuasive potential of haptics within advergames is associated with players' performance, which makes it especially useful to attract players' attention and guide their interpretation. However, the possibilities to implement haptic persuasion within digital games depend on where and how interaction takes place. Especially in the case of haptic feedback, specialized input/output tools are necessary to provide the feedback intended. It follows that, although haptic persuasion has a lot of potential, this persuasive dimension has not been widely exploited in the field of advergames.

3.2.5. Procedural Persuasion

Procedural persuasion is concerned with how meaning can be inferred from the rules of the game and the relationships that the rules of the game establish between the signs of the persuasive dimensions of the first level of persuasion. Therefore, it is not only that the rules of the

game can be interpreted by the players, but, as a system, they also help players to interpret what they see, hear, read and feel.

Bogost defines the term procedural rhetoric as referring to "the art of persuasion through rule-based representations and interactions" (2007, p. preface ix). To be consistent with the approach of this paper, I refer to the use of the mechanics of the game with persuasive intentions as procedural persuasion, rather than persuasive rhetoric. I have already discussed in depth Bogost's arguments on procedural rhetoric and the importance of this persuasive dimension in Chapters 1 and 2. In this section I will focus my attention on explaining how procedural persuasion can be implemented within advergames.

Game rules are a powerful tool for persuasion because they are usually loaded with conventions that the players understand based on their previous experiences. Combined with game's interactivity, the game rules are key to making the game a performable experience, which differentiates persuasive games from other kinds of persuasive contents. From a persuasive point of view, the rules of the game have the primary function of guiding the player through the game and consequently have an important role in establishing relationships between the signs contained in the persuasive dimensions of the first level, helping players interpret their experience.

According to game scholar Gonzalo Frasca, there are at least four types of rules that can be designed to persuade players within digital games (2007, pp. 118-119), these are: (1) model rules, (2) grade rules, (3) goal rules and (4) meta-rules. The model rules define how the playworld works and therefore set the boundaries of players' activity (Frasca, 2007, p. 118). An advergame that uses the possibility of designing model rules with persuasive intentions is *Nikko RC Racer* (Paladin Studios & Concepts, 2013). The game, commissioned by the radio-controlled toy manufacturer Nikko, was released on the company's fifty-fifth anniversary with the intention of allowing players to control Nikko's ten radio-controlled cars in a digital experience. In the game, the players can choose to control one of the ten different vehicles, which have different capabilities reflecting their capabilities in the physical world. This feature not only provides different racing experiences within the game world but also informs the player about the benefits of each of the models and the differences between them.



Figure 10. Screenshot of the advergame *Nikko RC Racer* (Paladin Studios & Concepts, 2013).

The grade rules deal with any characteristic of the game that is measured within it, such as scores or energy levels (Frasca, 2007, p. 118). An example of a persuasive use of grade rules can be found in the game *Red Bull Flugtag Flight Lab* (Less Rain, 2008). In this game, players need to design and build their own aircraft and make it fly through as many gates as possible in one of the ten available locations. During the flight players lose energy that they can replenish by collecting Red Bull cans (see Figure 11). Therefore, the energy level in the game is visually represented by Red Bull cans. Taking into account that Red Bull is an energy drink, it is obvious that the brand established a visual metaphor between the Red Bull drink and energy that tries to suggest that drinking Red Bull gives energy and 'fuel'. This is understood thanks to the way the grade rules of the game make the player interpret the visual representation of the cans of Red Bull. Without the grade rule, the player would never associate the image of the can in the game with energy. Accordingly, the grade rule could never suggest this interpretation without this specific visual representation. If the visual representation of the energy level were completely different, the player would not link energy with the brand. Therefore, in this case

visual persuasion and procedural persuasion are used together to address a specific interpretation through a multimodal sign.

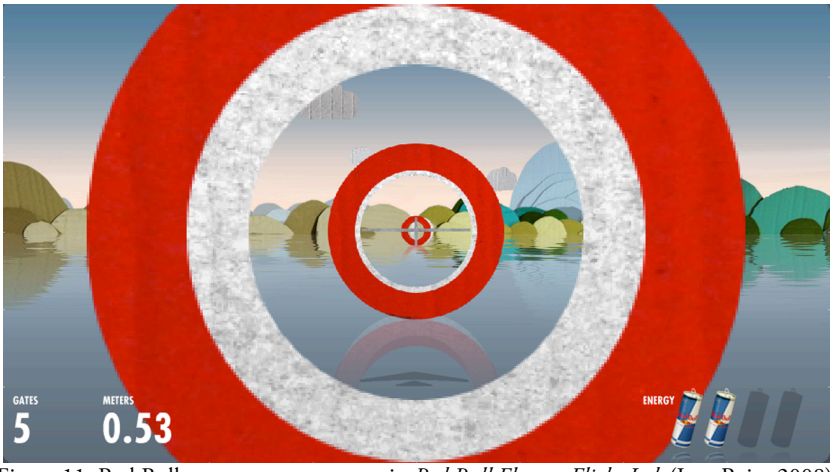


Figure 11. Red Bull cans represent energy in *Red Bull Flugtag Flight Lab* (Less Rain, 2008)

The goal rules define the stated aims that lead to victory and defeat (Frasca, 2007, p. 119). If we can assume that players always want to win the game, these rules are supposed to define what they must and must not do. However, it must always be considered that cheating is likely to occur in almost every kind of game. Designers need to bear this in mind, although it is not possible to foresee all of a player's actions.

Using goal rules with persuasive intentions is influenced by the relationship between game goals and advertising goals. Below I discuss in further depth different ways in which game goals and advertising goals can be related and how the different relations can influence the use of goal rules with persuasive intentions (see section 4.1.). In this section I would like to analyze an example in which game goals and advertising goals do not overlap.

The strategy that I want to discuss here is used in the advergame The *Handytest* (Try/Apt & Copyleft, 2013). The game was commissioned by the Norwegian website of the classified ads business FINN.no, which launched it to promote a new service for hiring contractors. The objective of this game is to make players aware of their need to hire contractors. For that purpose, the brand proposes an advergame that challenges players to find out how handy they are. In the game, the player needs to identify a series of tools, know what are they used for,

and to demonstrate knowledge in subjects such as electricity or carpentry (see Figure 12). At the end of the game, players are given an average score of how handy they. In this way, players discover where their knowledge is lacking and thus for which tasks they will need help. The game finishes by reminding the players that in case they need help, there is a network of professionals available to help them on FINN.no.

In this case the game goal and the advertising goal do not completely overlap because even though both were set to make players aware about their lack of knowledge, the advergame is designed in a way that makes players believe that the real objective of the game is to let them demonstrate their level of handiness. This game delivers a challenge that engages players through provocation, and this may make them let their guard down. Consequently, when they discover the 'real' intentions of the game, it is too late, and the persuasive message has already been conveyed.

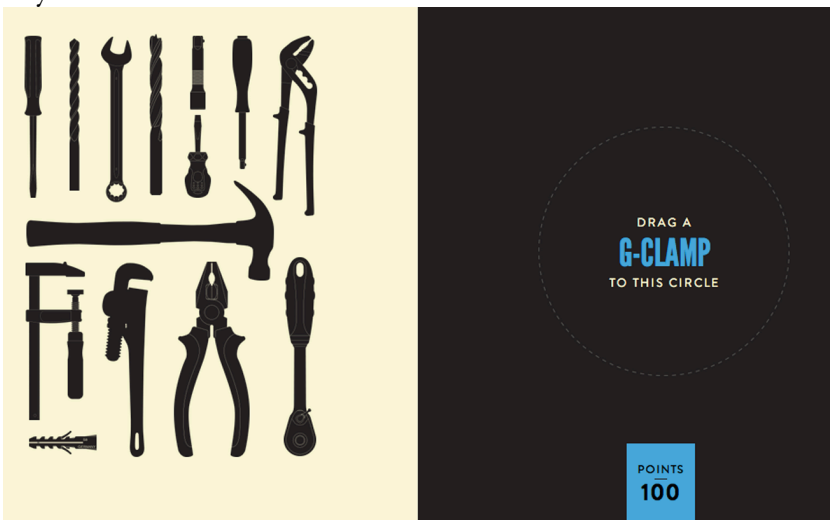


Figure 12. One of the challenges of *The Handytest* (Try/Apt & Copyleft, 2013).

Finally, meta-rules define how the player can modify the game's rule system (Frasca, 2007, p. 119). These rules include the ones that allow players to customize the game, for example, by changing its difficulty level. The design of meta-rules with persuasive intentions was used in the game *Airman Challenge* (GSD&M & Blockdot, 2013). This advergame was launched to give visibility to the work of the U.S. Air Force. In the game, the player needs to face missions undertaken day in

and day out by United States airmen. To face those missions, players need to choose their team (see Figure 13). If they make a poor choice, the mission cannot be accomplished.

Persuasion works here thanks to the combination of procedural persuasion, visual persuasion and linguistic persuasion. In this case the meta-rules of the game allow the player to select the team, but it is the way in which the possible members of the team are presented to players that allows them to learn more about their respective roles in the army. The pictures of each of the prospective team members give the player information about how their roles are performed. Additionally, the descriptive texts that accompany the images inform players more about their skills and their specific abilities. This information needs to be checked by the player in order to select the right team to accomplish the mission. Therefore, playformance persuasion is guiding the player through the visual and linguistic persuasive dimensions.

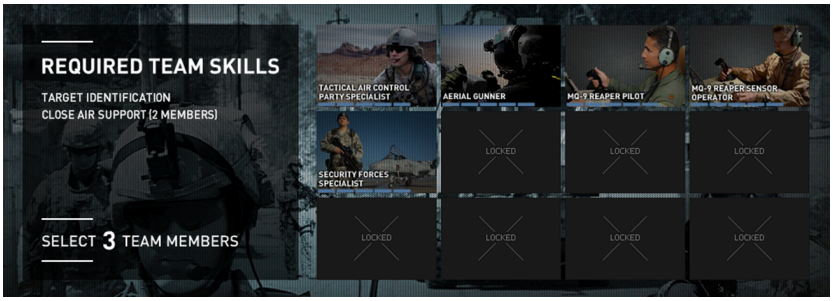


Figure 13. Screen in *Airman Challenge* (GSD&M & Blockdot, 2013) in which the player needs to select the right team to accomplish a mission.

In conclusion, the rules of the game have an important role in guiding player's interpretation of the signs present in the persuasive dimensions of the first level. Furthermore, the rules can also become meaningful themselves because they can be designed according to conventions that can be interpreted by players.

3.2.6. Narrative Persuasion

The second aspect of the game that can be used to establish relationships between the signs of the first level of persuasion is the narrative of the advergame. The use of narrative with persuasive intentions consists in evoking images, in other words "convert[ing] our

telling into some sort of 'higher common sense' by personalizing it, playing on the hearer's identification" (Amsterdam & Bruner, 2002, p. 135).

There has been a broad debate between ludologists (e.g. Aarseth, 2004; Adams, 1999; Costikyan, 2000; Eskelein, 2001) and narratologists (e.g. Murray, 1997; M.-L. Ryan, 2005) concerning the possibility of studying games using principles of narratology. Ludologists have argued that "interactivity is almost the opposite to narrative" (Adams, 1999, para. 17) and that there is a "direct, immediate conflict between the demands of a story and the demands of a game" (Costikyan, 2000, p. para 8). However, this debate has moved on since the ludologist Gonzalo Frasca (2003) has shown that ludologists never ruled out the narrative in the game, and the narratologist Janet Murray has stated that "no one has been interested in making the argument that there is no difference between games and stories or that games are merely a subset of stories" (Murray, 2005, p. para 9). In this thesis I agree with the position of authors such as the media scholar Henry Jenkins who has advocated a mid-way course pointing out that although "not all games tell stories", actually "many games do have narrative aspirations"; however ,"if some games tell stories, they are unlikely to tell them in the same ways that other media tell stories" (Jenkins, 2004, p. 2). In this section, I will analyze the different ways in which narrative and narrative elements can be used within digital games to persuade players.

In order to understand how narrative persuasion can be implemented within advergames, I would like to introduce the difference established by game scholar Gordon Calleja (2009) between scripted narrative and alterbiography. Calleja describes scripted narrative as the "narrative content and structures that have been written by the designers" and alterbiography as "the narrative generated during the gameplay" (2009, p. 4). Both scripted narrative and alterbiography depend on three narrative elements: (1) the story, (2) the characters and (3) the space. However, whilst the main plot and secondary plots of scripted narrative are written by designers, plots of alterbiography emerge from players' performance. Therefore, besides the three narrative elements mentioned, alterbiography also depends on the interaction of the player with the rules of the game (Calleja, 2009, p. 5). The narrative emerging

from the interaction of the player with the rules is "a combination of rules, representations and imagination" (2009, p. 7).

The Story

The first element of the narrative that can be designed to persuade players is the story. The story of a game is the chronological order of its events. Narrative games, namely games in which the story plays a significant role, contain a "scripted succession of events that the player has to perform in a specific order" (Egentfeldt-Nielsen, Heide Smith, & Pajares Tosca, 2008, p. 172). Although not all games require a scripted story, most of them are much improved by the addition of one, and the importance of the story increases along with the complexity of the game (Rollings & Adams, 2003, pp. 91-92).

The story of a game can be useful to persuade players because it can reduce players' resistance to persuasive messages and reduce cognitive loads in complex games. Resistance can be avoided by the use of narratives because narrative is not based on arguments but tells stories so the reader is left with no arguments to refute. Furthermore, counter-arguing may also be inhibited by narrative because arguments might not be noticed by players until it is too late (Dal Cin et al., 2004, p. 178). Narrative involvement also plays an important role in this sense, inasmuch as the ability and motivation of the reader to generate counterarguments weaken with the cognitive and emotional demands of absorption. Social psychologists Melanie C. Green and Timothy C. Brock have demonstrated that narrative persuasion "lead[s] to belief changes that resist counterinfluence and that persist longer over time" (2002, p. 336). Thus, scripted narrative that embeds information about a brand by evoking certain images helps to engage the player and results in an experience that is meaningful from the point of view of the brand.

Furthermore, the use of storylines can reduce cognitive loads in complex games by making it easier to understand their virtual worlds. The communication scholars Lee, Seung-Jin, Park and Kang have demonstrated that an engaging background story that gives crucial information about the gaming environment or provides a framework for a mission-based game structure increases players' feelings of physical and spatial presence (2009, p. 29). As mentioned above, when players have problems understanding the structure of an advergame, they might retain less information (Plummer, 1971, p. 322). Therefore, the story of

an advergame can increase its efficiency by helping the player understand its structure.

The advergame *Black Sunshine* (Extreme Group, 2010) is a good example of how a storyline can be used with persuasive intentions. The game was designed for Caribbean Farms' Black Sunshine Coffee to provide a unique e-commerce experience that allowed players to actually purchase the coffee beans. The game was designed around a storyline in which the purchase of the coffee is compared to a drug deal. In the game, the player travels to the Caribbean Islands and has to close a deal in a dirty abandoned house to purchase coffee beans that are sold in kilos. The drug-deal angle of the storyline was created to communicate the idea that the coffee beans are high-end and rare, so they can be compared to an illicit substance. The objective was to design an experience that would reach out to the next generation of premium coffee drinkers. In this case, the storyline served to deploy a controversial experience that served not only to convey the advertising message but also to trigger its viral dissemination. Furthermore, at the end of the game the players are actually directed to close their deal with a real purchase of the coffee beans. Therefore, the storyline also served to incorporate the purchase in the game in a natural manner totally integrated in the gameplay.

The characters

The second narrative element that can be designed to persuade players includes the characters and their actions. The characters can have an important role not just in their functions in a game's scripted story but also through the alterbiography, the narrative generated during the gameplay. Moreover, the revolution offered by digital games means that the players can act as characters themselves, and they can expect reactions to their own actions (Egentfeldt-Nielsen et al., 2008, p. 178). This fact induces psychological empathy with the character, which increases a player's feeling of identification with the character (Lee et al., 2009, p. 30). Characters have an important role in alterbiography, and inasmuch as players establish a psychological empathy with them, the definition of game characters can be used to enable or avoid possibilities in the development of alterbiography's events. To put this in context, the resulting alterbiography in Grand Theft Auto could be

influenced if, instead of playing as a criminal, players could take on the role of a nun who cannot steal cars or kill people.

The game scholars Simon Egent Egentfeldt-Nielsen, Jonas Heide and Susana Pajares Tosca state that the language of digital games allows us to define the way in which characters are created in a series of sophisticated ways (2008, p. 179): through what players can see of them on screen, through their actions, through their relationship with space, through other characters' view of them and through their meaningful names. All of these variables have to be considered when designing characters with persuasive intentions. Furthermore, from a persuasive point of view it is also necessary to pay attention to the following attributes of the characters: their physiology, their sociology, their psychology, their relationship with the story, their role within the story, the extent to which the players can interact with them, the extent to which players can customize them and the identification of the character with the brand.

Let us return to one of the advergames that has been already mentioned in this thesis *Get the Glass!* (North Kingdom, 2007). As previously discussed (see p. 33 of this thesis), the selection of the characters in this advergame helped overcome one of the challenges of the design. The game was aimed to increase milk consumption among U.S. citizens in general. One of the decisions made was to choose a whole family, the Adachi family, instead of a unique character, to star in the game. The family was composed of four members: a mother, a father, a son and a daughter (see Figure 27). By this decision, the designers avoided a possible difficulty related to identification because with the four characters, citizens of different ages and sexes were represented.

Furthermore, each of the characters had a specific problem in the game resulting from a lack of milk consumption: the father had weakened bones and muscles, the daughter had problems with her hair and her nails, the son had decayed teeth, and the mother had mood swings due to hormonal changes. Throughout the game the problem of each of the characters poses different challenges, and the player discovers, thanks to other persuasive dimensions, that these problems can be avoided by increasing milk consumption. Therefore, the definition of the characters of the advergame serves not only to increase players' identification but also to establish relationships with other signs

in the system, which allow the player to understand the advertising message.

The Space

The third narrative element that can be designed to persuade players is the space. The space is a narrative element that has meaningful functions in both scripted narrative and alterbiography. The space is important for scripted narrative because actions take place in the space and it contains the characters of the story. Furthermore, it is important for alterbiography because game spaces can be transformed by the user at the same time that the story is being constructed. In this regard, the social computing scholar Amy Bruckman states that in those games in which there is no scripted narrative or its presence is minimal, a combination of spatial, temporal and thematic mapping can be used to construct a *storyspace* that can be explored by the player, resulting in a non-linear and personal storyline (1990, p. 1). Accordingly, the media scholar Henry Jenkins states that game designers should be considered narrative architects more than storytellers (2004, p. 13).

In order to understand how the design of game spaces can be used with persuasive intentions it is important to distinguish between explicit and implicit space. Explicit space is the world that is represented on the graphic interface at every moment. Within the explicit space it is possible to distinguish between the selection space and the representational space. The selection space corresponds to the interface, whilst the representational space is the one which has the contents selected through the interface. In cases where the selection space and the representation space are coincident we can talk about mimetic-natural spaces (Moreno, 2002).

The implicit space is the off-screen space that is visible or audible to the characters (Chatman, 1990, p. 103). In digital games off-screen space can be passive or active. While in passive off-screen space nothing happens, active off-screen space can be explored by the player. Sometimes the player will have freedom to explore the space at his own pace, but in other cases exploration will be forced by the game mechanics. The gradual unveiling of the game space through exploration is known as scroll, which can be horizontal, vertical or free (Egentfeldt-Nielsen et al., 2008, pp. 117-120).

All the space elements of advergames can be designed with a persuasive intention. Moreover, the possibilities provided to players to navigate through the space can also be designed to be expressive themselves. Although there appears to be a preponderance of advergames which avoid spaces that can be explored by the player, the design of game spaces that provide freedom of movement to players can make them feel in control of the situation, which makes them let their guard down against persuasion. This can be useful in advergames to overcome players' resistance to advertising messages. Moreover, it can also be used as a strategy to increase retention of players, who can be motivated to return to the game to explore the uncharted territory.

Jenkins (2004) proposes four ways in which spatial stories can provide engaging narratives that can be used with persuasive intentions within advergames. The first possibility is to design an evocative space that can evoke pre-existing associations in the mind of the player. These associations can be used in advergames to evoke spaces with persuasive intentions such as calling up pleasurable experiences that create a positive attitude towards the game.

The second possibility is to design a space that provides the players with the necessary elements to build their personal experience by exploring the space. In this case, players' interactions with the space result in micro-narratives that shape the players' emotional experiences and provide players a sense of freedom which can lead them to let down their guard against persuasive communication. At the same time, the elements provided to the players to build their personal experience can be designed with persuasive intentions.

The third possibility is to embed information within the visual representation of the space. In this case the designer can neither control when players receive bits of information nor assume that they are going to locate or recognize the significance of any given element. Hence, essential information should be redundantly distributed across the game space. This approach allows for a balance between the flexibility of interactivity and the coherence of a pre-authored branded message.

The fourth and final possibility is to organize game spaces by thinking about the possible performances of the player in order to foresee likely outcomes and consequences. In this case the persuasive message can be embedded according to the possible outcomes and consequences.

An example of an advergame in which space is designed to trigger spatial exploration with persuasive intentions is *Energuy* (Bos, mamooth, & Jet Films, 2008). The game was released by Quebec's Agence de l'efficacité énergétique to show the importance of saving energy. In order to achieve this goal, the game situates players in a house in where they have to guide the main character to locate objects that can help him to save energy. At the moment the player finds one of the objects, it is transformed with the aim of saving energy. One of the objects that need to be located, for example, is a boiler that it is not properly insulated (see Figure 14).

The search for objects in *Energuy* has to be done in a limited amount of time; therefore, players do not have enough time to try all the objects they find on their way, but they have to think quickly about the objects that are useful. This strategy encourages the player to have an active attitude in the search for the objects that can be transformed or used to save energy. This implies that the player needs to think about these objects and the amount of energy they use in order to take the right decisions. It follows that the involvement of the player in the search has positive consequences in the retention of the information conveyed within the game. Furthermore, the advertising message is reinforced at the end of the game when the achievements are presented to the player. At that moment, the player can check all the items that have been found and the number of items that remain to be found. When players did not find all the objects, they will realize the lack of knowledge they have in the subject. Players can also check a description of each of the objects found, in which they can learn about how they can be transformed or used to save energy.

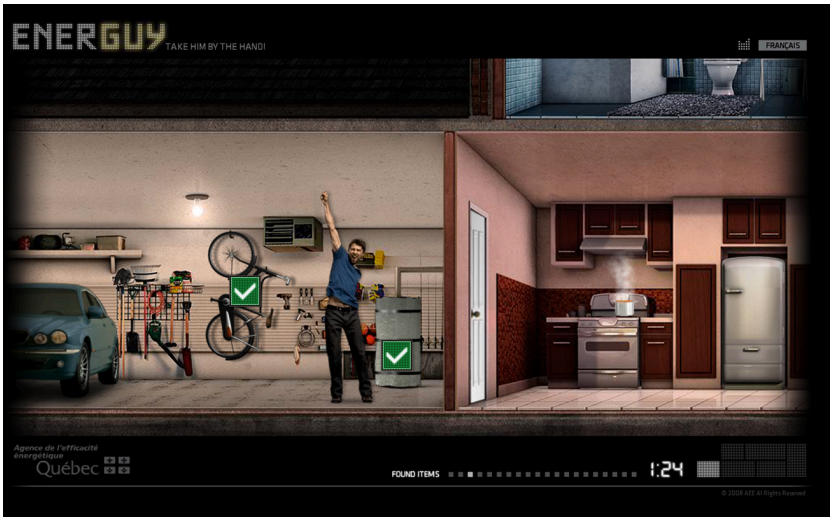


Figure 14. The Energuy finds the boiler that needs to be insulated.

To sum up, the persuasive potential of narrative elements within advergames is huge. Narrative persuasion can be implemented by making use of scripted narrative or by the design of narrative elements such as the characters with the intention of having a persuasive impact on the development of alterbiography.

3.2.7. Cinematic Persuasion

Cinematic persuasion is concerned with how meaning can be inferred from the cinematic treatment of the audiovisual contents of the game and the relationships that this cinematic treatment establish between the signs of the first level of persuasion. In this section I focus on properties exclusively intrinsic to the cinematic. It is important to highlight that with audiovisual contents I mean not only audiovisual pieces such as cut-scenes but that I refer to the cinematographic treatment of all the elements of the game. I have identified that cinematic persuasion within digital games can be executed by (1) the framing of a scene, (2) the camera movements, and (3) the editing.

The framing of a scene is related to the position of the camera and the proportions of the objects that are within the frame (see Dubbelman, 2013). Framing is the result of camera position and camera angles (Newman, 2009, p. 92) which can be used with persuasive

intentions within advergames by using codes which players know how to interpret, thanks to their previous experience.

The camera position determines which elements are shown on the screen and how they are shown (Newman, 2009, p. 93). The two variables related to camera position that can be used to influence players' interpretation are the size of the objects shown on screen and the position of those objects. The size in which objects are shown on screen is related to the importance given to them, whereas their position is related to the attention they are going to receive from players. According to the Rule of Thirds, the center of the screen is the major area of importance and therefore, the area that receives most attention from players (Newman, 2009, p. 94)

The selection of camera angles can be used with persuasive intentions within advergames to give certain meaning to a scene in the game by using codes that players know how to interpret thanks to their previous experience (Newman, 2009, p. 92). The pitch of the camera can be used to emphasize the hierarchy of elements in the scene. A low-angle shot makes players feel more involved in the events of the scene but also arouses a feeling of submission, whereas a high-angle shot gives players a feeling of dominance but a lower sense of involvement (Hawkins, 2005, p. 9). Camera angles can also determine the point of view of the player, shifting the perspective of the player from first person to third person, which also has consequences for involvement. Furthermore, the use of inclined or unexpected camera angles can intentionally generate feelings such as confusion, disorientation or mystery.

Another way to execute cinematic persuasion within advergames is by the use of camera movements, which can add to the excitement of a game by keeping the action in the frame. Camera movements can be employed to influence players' interpretation by shifting their attention (Hawkins, 2005, p. 54). Camera moves comprise dolly and crane moves, panning and tilting. Dolly moves are horizontal moves of the camera, and crane moves are vertical moves of the camera. Panning refers to the horizontal view of a stationary camera, and tilting refers to the vertical view of a stationary camera (Bos et al., 2008, p. 100).

Finally, editing refers to the arrangement of sequences of consecutive images. This includes continuity, juxtaposition and fragmentation. Editing can be used to make transitions between disparate locations or to move the story forward (Hawkins, 2005, pp. 210-212). Editing can

also be used with persuasive intentions within advergames by establishing relationships between signs and by making use of contrasts. The use of contrasts in editing can serve to generate new signs through the relationships established by the juxtaposition of signs (Hawkins, 2005, p. 223).

In 2003 candy brand Altoids launched the advergame *Curiously Strong All Night Long* (WDDG, 2003) to introduce breath strips in peppermint and cinnamon flavors. Breath strips were at that moment a new product, and not everybody knew them or how to consume them. The advergame was created not solely with the intention of introducing the new product but also to let people know about its benefits and show them how to consume it. The advergame was inspired by the graphic adventure games of the time, and the objective of the player was to help the protagonist, the world-class loser Big Bad Al, find a local celebrity punk rocker in a pub nightclub and convince her to hang out with him. For that purpose, players needed to follow clues and find items that they could use to find his way to the celebrity.

One of the items Big Bad Al had in his inventory in the game was a tin of Altoids' breath strips. When the player uses this item within the game, dragging it from the inventory to one of the characters on the screen (see Figure 15), a short cut-scene is shown consisting of two juxtaposed images. In the scene, the player can see Big Bad Al showing the tin of Altoids to the character (see Figure 16), and then giving her one of the strips (see Figure 17). After that she comments that it was a very refreshing experience. Through this short cut-scene the player learns that the product consists of small strips of edible paper that are placed in the mouth and that quickly produce a refreshing feeling.

In this example, designers use framing, camera movement and editing to convey the advertising message and increase its effectiveness. When Big Bad Al offers the product to the character, the shot changes from a long shot, showing the entrance of the pub and a group of characters, to a close-up showing the faces of the two characters and the tin of Altoids. This change of shot serves to center the attention on the product and on the action related to it. Through this close-up the level of involvement with the characters and the product also increases. Furthermore, the tin of Altoids is precisely at the center of the screen where the attention of the player is supposed to be focused.

Whereas the cut-scene is created with still images, the camera executes a slow dolly movement from right to left with the first image, and from left to right in the second image. This action moves the Altoid strips from the sides of the screen to the center, thereby generating more attention to the product. The editing summarizes the whole action in two images, thus quickly conveying the message without breaking the flow of the game. The editing also serves to reduce the action to the two most important moments, helping the player to grasp the intended message.

Other cut-scenes similar to this one are shown every time the player uses one of the products in his inventory. Consequently this cut-scene is not perceived as an intrusive persuasive message but as part of the mechanics of the game. This serves to overcome resistance to the persuasive message, increasing its effectiveness.



Figure 15. The player drags the Altoids tin to one of the characters

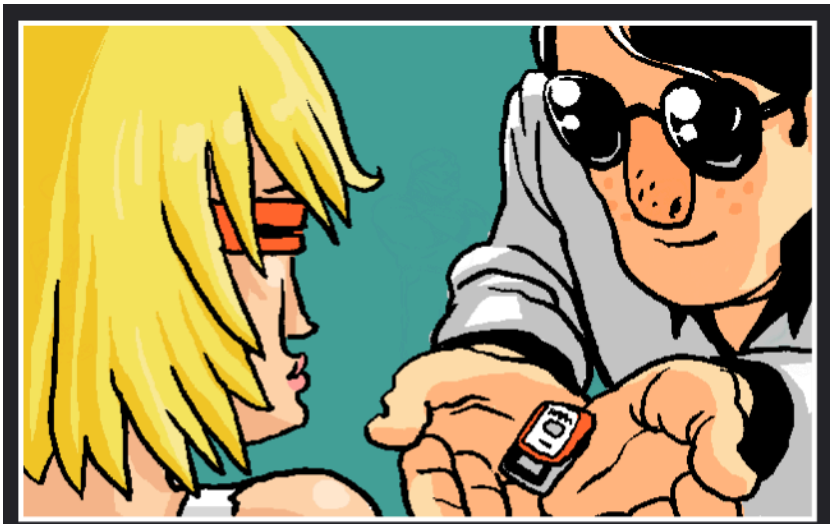


Figure 16. Big Bad Al shows the Altoids tin to the character

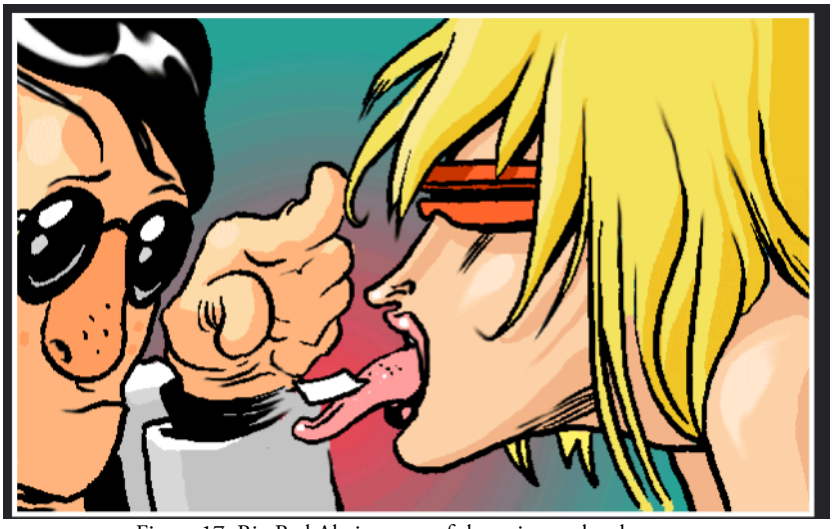


Figure 17. Big Bad Al gives one of the strips to the character

In summary, cinematic persuasion is of special relevance within advergames because it determines which elements the player sees on the screen, how those elements are placed in relation to each other and how the player sees them. Therefore, cinematic persuasion has an important role in determining how players interpret the information they see on their screens because it establishes relationships between the elements.

3.2.8. Sensorial Persuasion

Sensorial persuasion is aimed at the five individual senses (sight, hearing, taste, smell and touch) with the objective of triggering sensory experiences. David W. Norton, specialized in experience research, has proven that sensory pleasure results in "customers' positive evaluation, stimulat[ing] their desire of consumption and improv[ing] the value of products" (2003, p. 24).

Advergames' capacity to provide meaningful sensory experiences resides in their "sensory breadth", defined by the researcher in virtual reality Jonathan Steuer as the number of sensory dimensions simultaneously presented to the player within the game (1995, p. 45). Each of the different sensory dimensions presented to the player in an advergame has the potential to become meaningful. Visual elements can be used to deliver sight sense experiences. Sound elements can be used to provide hearing sense experiences, and haptic elements can work with touch sense experiences. Smell and taste may appear to be outside of the reach of advergames, but they are not because the combination of the previously mentioned elements can deliver experiences that also stimulate those senses, as shown in the following example.

Nespresso Variations (Soleil Noir & Chez Eddy 2010) is an example of how to deliver sensory experiences through digital games. This advergame has problems in terms of motivation (see p. 165). However, it does a great job in arousing a sensorial experience. The experience is totally focused on the five senses in order to create a cognitive framework in which the player experiences that drinking one of the new Nespresso coffee variations is like being transported to a very pleasant world.

In the game the player has the opportunity to play three different mini-games with the goal of helping an imaginary system to serve a cup of coffee. Playing them is just an excuse to have contact with the sensorially amazing *Nespresso Variations'* world in which the design, the music and the cinematic treatment of the images transmit a very pleasant feeling that specifically targets the senses of sight, taste and smell. The experience is so well designed that the player can almost smell and taste the coffee variations.

Therefore, by making use of sensorial persuasion, advergames have the potential to influence players' attitudes towards the advergame and

by extension towards the advertisted product and/or brand. This is possible through the design of experiences that address players' senses.

3.2.9. Affective Persuasion

The affective persuasive dimension stirs up the customer's deeper feelings and emotions with the objective of triggering affective experiences. According to the marketing communication scholar Bernd H. Schmitt, affective experiences in advertising can go from slightly positive feelings to strong emotions associated with a brand (2000, p. 6). It has been observed by the marketing communication scholars Flemming Hansen and Sverre Riis Christensen that consumers' emotions do influence the choices they make (2007, p. 200). Therefore, affective persuasion can be used to arouse emotions which players can link to the brand or product advertised. It follows that these emotions can influence consumer behavior and choices outside of the game. Hansen and Christensen also proved that when consumers' involvement with products or brands is low, emotions generated by the advertisement can be especially effective in influencing consumers' behavior (2007, p. 114).

It has to be said here that the empathy and the attitude of the player will determine the effectiveness of this strategy. Additionally, to make this persuasive dimension work properly it is necessary to have a good understanding of which stimuli cause concrete sensations. It is important therefore to differentiate between moods and emotions.

Moods are triggered by specific stimuli and can be misinterpreted by customers because they are usually not aware which stimuli have caused them (Hansen & Crhistensen, 2007, p. 72). After playing an advergame that has irritating background music, for example, players can think that they did not like the experience at all because they felt irritated during the gameplay, and they will probably associate that mood with the brand.

Emotions are intense affective states caused by something or someone that consumes our energy for some amount of time (Hansen & Crhistensen, 2007, p. 74). It is possible to differentiate between two kinds of emotions: basic emotions and complex emotions. Basic emotions are the fundamentals of our emotional life and include emotions like happiness or sadness (2007, p. 112). These types of

emotions are common to all human beings and the way of expressing them is similar in every culture. Hence, working with them is useful in international campaigns.

An example of an advergame working with a basic emotion is *Hotel 626* (Goodbye et al., 2008) (see Figure 18), a scary experience commissioned by Doritos. In the game, which was available to be played only from 6 p.m. to 6 a.m., thus in the dark, players were trapped in a hotel from which they had to get out. Some challenges, like singing a demon baby to sleep had to be completed in order to escape. The advergame used several techniques to deliver an intense experience based on the feeling of fear such as using the players' webcams to sneak a picture of them and show it later inside the lair of a serial killer. The film scholar Andrew Tudor has proven that horror provokes strong responses (1997, p. 443). Thus, horror makes the game experience more memorable for those who have played it. This undoubtedly has consequences for brand's familiarity and recall. Furthermore, those players who enjoy horror experiences will link the joy experienced during the game session with the brand, which will affect positively their attitude towards Doritos.

Complex emotions are combinations of basic emotions that can work differently depending on the culture (Hansen & Crhistensen, 2007, p. 112). *Perfect Strangers. The Video Game* (Oda, 2012) (see Figure 19) is an example of an advergame using a complex emotion to persuade players, in this case nostalgia. This advergame about the popular 1980s TV show *Perfect Strangers* is a simple Flash game that consists of helping the character Balki collect all the stars that he finds along a path. The use of the appealing and catchy theme song from the TV show, "Nothing's gonna stop me now", gives a feeling of nostalgia that led many players to revisit the show on iTunes.



Figure 18. *Hotel 626* (Goodbye et al., 2008)



Figure 19. *Perfect Strangers. The Video Game* (Oda, 2012)

In conclusion, affective persuasion can be used within advergames to generate arousal, which can influence consumers' behavior in response to emotions. Furthermore, aroused emotions can influence players' involvement and by extension players' attitudes towards the product and/or brand advertised.

3.2.10. Tactical Persuasion

This persuasive dimension aims to provide appealing experiences for creative customers by delivering intellectual challenges. According to Schmitt, intellectual challenged can engage customers through surprise,

intrigue and provocation (2000, p. 6). Tactical persuasion is directly related to tactical involvement, defined by the game scholar Gordon Calleja as the pleasure aroused by planning the strategies to follow in the game (2007, p. 89). Therefore, tactical persuasion can be used to motivate customers by encouraging them to solve intellectual challenges, which can arouse feelings of confidence, control and power.

According to Joy Paul Guilford, one of the founders of the Psychology of Creativity, productive thinking can be divided into two types: convergent thinking and divergent thinking (in Schmitt, 2000, p. 12). Thinking experiences can be designed with one or both types. Convergent thinking is related to analytical reasoning and consists of a process in which the individual reaches a conclusion after analyzing information that has been provided or facilitated. An example of this can be seen in *Day in the Cloud* (Virgin America & Google Apps, 2011) (see Figure 20), a convergent-thinking experience first tested on Virgin American planes traveling between the Los Angeles and San Francisco international airports. The experience consisted of an online battle in which the aim was to get passengers of two ordinary flights flying at the same time in opposite directions to join in. Using the Wi-Fi connection provided during the flight, players were encouraged to solve a series of questions, the answers to which could be found on Google. At the end of the flight, the passengers of the plane with highest scores won a notebook computer. A Boeing Boeing video reporting the experience shows a group of shy players at the start of the game who ended up screaming, asking for answers from fellow passengers and saying things like: "I was born to do this. I was born to Google stuff on a plane" (2011). Undoubtedly, this advergame influenced the way passengers experienced the flight and probably they linked the positive feelings aroused by the experience to the brand.

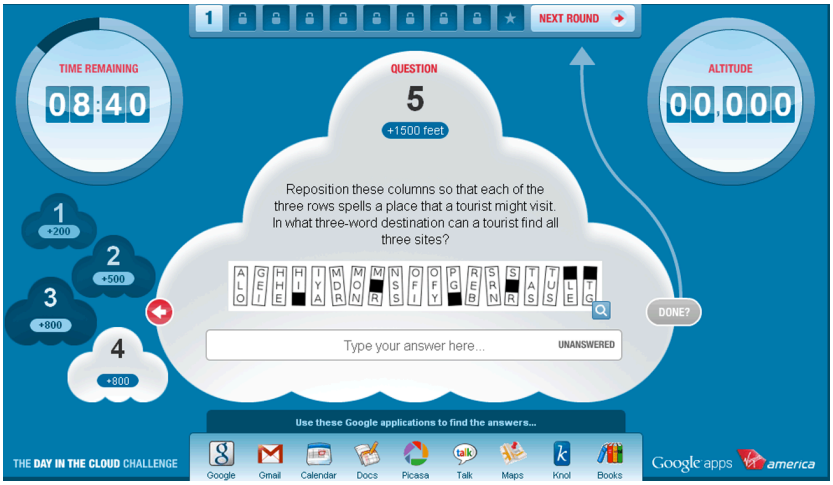


Figure 20: *Day in the Cloud* (Virgin America & Google Apps, 2011)

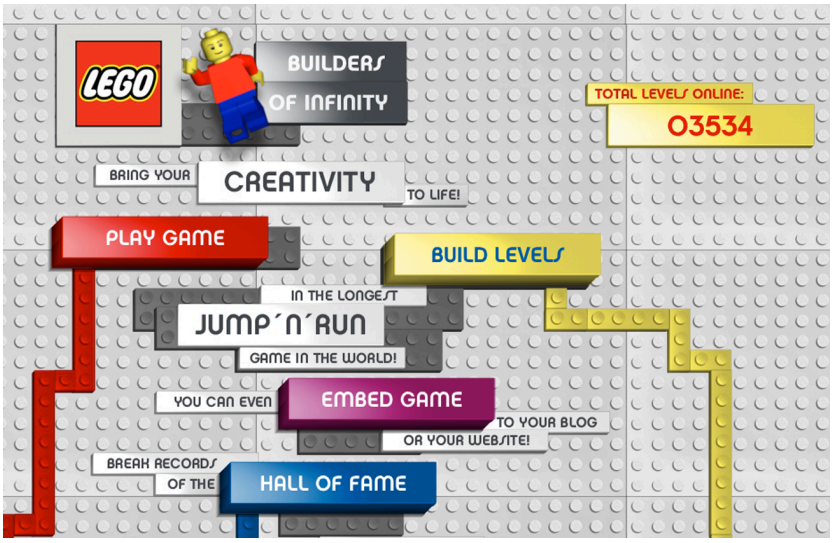


Figure 21: *Builders of Infinity* (Serviceplan, plan.net camping, & Sven Busse, 2011)

The second type of tactical persuasion is related to divergent thinking, i.e. the intellectual process in which the individual looks for new and alternative answers out of the information provided (Guilford in Schmitt, 2000, p. 12). Divergent thinking is linked with creative processes and can be used to motivate players by providing diversity and letting them express themselves. Lego's *Builders of Infinity* (Serviceplan et al., 2011) (see Figure 21) is an example of advergame that aims to

deliver a creative experience related to divergent thinking. The game proposes that players construct their own platform game by using Lego bricks. Players can both play the platform game and participate in the construction of the longest platform in a game. This persuasive strategy serves to arouse in players a feeling of control and power, which in turn causes them to let their guard down to persuasive communication, overcoming resistance.

To sum up, tactical persuasion can be useful to motivate players to engage in advergames' experiences, increasing their level of involvement with the advertising message. Furthermore, the feelings of control and power aroused when following this strategy are useful in overcoming players' resistance to persuasive communication, influencing their attitude towards the advergame and by extension towards the advertising message.

3.2.11. Social Persuasion

This persuasive dimension aims to influence players' attitudes by delivering experiences focused on encouraging players to establish relationships with other people or with the brand. Players can communicate with other players during the game session through chats, social media features, real-time audio or video or in-game interaction, for example. Furthermore, players can voluntarily or unwittingly communicate with brands during the game session through social features, registration forms, contact forms, email, chat or even with their own performance in the game. As previously discussed in Chapter 1 (see p. 35), advergames can make use of their nature as networked environments to increase player acquisition, virality and retention. Therefore, social persuasion can be used to work on advergames' visibility and playability.

According to communication scholars Subramani and Rajagopalan, players can establish four different types of relationships while playing advergames, depending on different motivations (2003, pp. 301-303): (1) players may want to establish relationships with other players, (2) players may want to make others aware about their achievements in the game, (3) players may want to recruit new players and (4) players may want to establish relationships to share information. It is possible to design persuasive strategies that encourage players to establish one or

more of these four types of relationships between players. In order to make them work, it is important to consider the reasons that make players share their experiences or establish relationships with others while playing.

The reasons why players establish relationships with others within advergames can be linked to direct and indirect benefits. The social psychologist Peter Kollock, who has studied how cooperation works in online communities, explains that direct benefits can be related to an improvement of the quality game experience, to the outcomes, the rewards or the performance (1999, p. 220). Meanwhile, indirect benefits can be linked to the feelings of reputation and reciprocity, to players' need or desire to belong to a group, and to an increasing sense of efficacy when sharing the experience with others (1999, p. 220). Players' motivations can have important consequences for the social relationships they establish during the game sessions and for the benefits the brand can obtain from those relationships.

Persuasive strategies that encourage players to establish relationships between them help engage players in the experience, which can have positive consequences on advergames' playability and player retention. An example of this can be found in *Greenpeace Weather* (AlampBBDO & colmeia, 2008) a strategy multiplayer game in which players are encouraged to become activists to fight against climate change. In the game each player needs to collaborate with three other players to find coordinated solutions to stop the environmental crisis. Without the collaboration of other players it is impossible to succeed in the game. This game mechanics encourages players to form relationships with other players and enter into a commitment with them. This bond gives players reasons to continue playing the game, favoring retention. Furthermore, this strategy also serves to convey the message intended by Greenpeace that climate change can be stopped only through collaborative efforts that look for coordinated solutions and require effort to make them work.

Persuasive strategies that encourage players to make others aware about their achievements in the game can have positive consequences on advergames' visibility and 'status'. The advergame *Free your Dance* (Zupa, Capsize, & hello monday, 2010), discussed below (see p. 153), challenges players to join via webcam a dance competition whilst wearing wired headphones, competing against a dancer wearing Halos.

At the end players are encouraged to upload a video showing their performance to a YouTube channel where they can share it with their friends and acquaintances. Players sharing the video adopted different attitudes during their performance, including those doing their best to demonstrate their dancing skills, those trying to create their own dance to demonstrate their creative skills, and those trying to be funny to make other people laugh along with them. The strategy of giving the player the opportunity to decide how to enjoy the experience resulted in multiple videos that motivated new players to join the game for different reasons. Therefore, the strategy served not only to make players spread the game virally but also motivated new players to join the experience encouraged by others' performance.

Persuasive strategies can also be designed to increase visibility by encouraging players to recruit new players in return for direct benefits in the game. Tohato's *World's Worst War* advergame (Hakuhodo, 2007) is a perfect example of how social persuasion can be used with persuasive intentions. This award-winning, multiplayer, online mobile game was launched to promote two new Tohato snack flavors: Tyrant Habanero Burning Hell Hot and Satan Jorquia Bazooka Deadly Hot. In the game customers were encouraged to buy one of the two snacks to choose their Master. In the packet they found an access code to join one of the two online armies with which they could fight a battle every day at 4 a.m. Players were able to choose their battlefield from thirty-one spots. The army that conquered all the battlefields won.

According to the developers, the game was extremely successful because of the social interaction. A player was able to get promotion in the army by recruiting friends as warriors under him, and this system spread the game all over the country. Players also started to meet up on social networks to set up strategies. There were also war reporters who sent SMSes round the clock, adding reality to the game. Every new player was supposed to buy the product. Thus, sales and site accesses increased dramatically to 100,000 pages views per day.

World's Worst War had most of the ingredients that make a branded experience a success. The consumers not only approached the experience voluntarily, but they bought the product before being involved in the experience. Once in the game, it turned into such a meaningful experience for them that they were willing to wake up in the middle of the night to join a battle. In addition, the players themselves

spread the word about the game in order to recruit warriors. It was such an engaging experience that they voluntarily spent extra time meeting their friends on social media to set up strategies, that meant extra time dedicated to talking about the brand and the meaningful experience they were living. And all those positive feelings were inevitably associated with the brand, helping to build the brand's image.

Persuasive strategies can also be designed to encourage players to establish relationships with the aim of sharing information. This technique can be particularly useful for brands trying to obtain valuable information about their target audience. An example of this can be found in the advergame *Pleasure Hunt 2* (Lowe Brindfords et al., 2012), previously discussed in chapter 1 (p. 36). The game offers players the possibility to create a challenge to compete against their friends. The challenge is created through a Facebook connection so players need to give the Magnum application access to their social profile. This action gives Magnum access to private information about players' social profiles, providing the brand with better knowledge of consumers' profiles, preferences and needs. Therefore this strategy serves to increase player acquisition and retention, improving visibility and playability and also provides companies with valuable information about advergames' targets.

In summary, advergames can use social persuasion techniques: to make players undertake viral actions, which influences advergames' visibility; to motivate players to keep engaged in the experience, which influences advergames' retention; and to make players establish contact with the brand, which can allow the collection of valuable information about advergames' targets.

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In this chapter I presented a new theoretical model in which I state that persuasiveness within advergames can be implemented within digital games by making use of eleven persuasive dimensions through three levels of persuasion. I complemented this theoretical model with a visual diagram that serves to visualize persuasive structures of advergames. The theoretical model presented in this chapter can be used for the study or implementation of persuasive strategies within advergames'.

VARIABLES FOR THE ANALYSIS OF THE PERSUASIVE STRUCTURE	
FIRST LEVEL OF PERSUASION	
LINGUISTIC PERSUASION • Name of the Game • Instructional Texts • Narrative Texts • Interface Commands • Dialoguess • Names of Characters • Names of Spatial Locations	VISUAL PERSUASION • Interface Design • Character Design • Objects Design • Spatial Design
SONIC PERSUASION • Interface Sounds • Sonic Effects • Ambient Sound Beds	HAPTIC PERSUASION • Haptic Input • Haptic Feedback o Tactile Feedback o Force Feedback

SECOND LEVEL OF PERSUASION		
PROCEDURAL PERSUASION • Model Rules • Grade Rules • Goal Rules • Meta-rules	NARRATIVE PERSUASION • Story • Characters • Space • Time	CINEMATIC PERSUASION • Framing • Camera Movements • Editing

THIRD LEVEL OF PERSUASION	
SENSORIAL PERSUASION • Sight Sense Experiences • Hearing Sense Experiences • Touch Sense Experiences • Smell Sense Experiences • Taste Sense Experiences	AFFECTIVE PERSUASION • Basic Emotions • Complex Emotions
TACTICAL PERSUASION • Convergent Thinking • Divergent Thinking	SOCIAL PERSUASION • Establish Relationships • Reputation • Recruit new Players • Share Information

In the second part of this chapter I explained the persuasive potential of each of the eleven persuasive dimensions that I consider in the theoretical mode, I identified the internal elements of each of these persuasive dimensions and used examples to illustrate how they can serve to persuade players. I also highlighted the most significant ways in which each of these persuasive dimensions can be used within advergames to persuade players and illustrated these uses with examples.

The table above includes all the persuasive dimensions discussed in this chapter as well as their internal elements. This table can be used as a guide for the application of the theoretical model presented in this chapter to the in-depth analysis of persuasiveness within digital games.

4. Persuasive Strategies for Advergames

In the previous chapter I presented a theoretical model to explain how persuasiveness can be implemented within digital games. This theoretical model can be used for the study and implementation of persuasive strategies within advergames. However, if we want to apply the theoretical model to the study of an advergame, it is important to first recognize which factors have determined the advertising strategy. Once we understand what those factors are, we can evaluate, making use of the theoretical model, whether the strategy has been effectively implemented within the digital game. Furthermore, we can also evaluate if the advertising strategy followed does fit with the medium selected to convey the advertising message, in this case a digital game.

Furthermore, if we want to apply the theoretical model for the design of an advergame through which to convey an advertising message, it will be necessary to make beforehand decisions concerning the conceptualization of the advertising strategy. And therefore, in order to make those decisions and be sure that the advertising strategy is going to fit the medium selected to convey the advertising message, in this case a digital game, it will be necessary to take into consideration the factors above mentioned.

The objective of this chapter is to answer the third research question of this thesis: *Which are the factors that determine the conceptualization of persuasive strategies for advergames?* Accordingly, this chapter is focused on

identifying the factors that determine the conceptualization of advertising strategies for advergames.[53]

Due to the interactive nature of digital games, the factors that determine the conceptualization of advertising strategies for advergames are related not only to the way the advertising message should be conveyed but also to how the game motivates players to play it and how it engages them to keep playing. I have thus identified six factors that should influence advertisers' decisions: advergames' objectives (section 4.1.), products in advergames' integration (section 4.2.), advergames' target (section 4.3.), advergames' visibility (section 4.4.), advergames' credibility (section 4.5.) and advergames' playability (section 4.6.). In the following sections I explain how these factors influence the process of decision-making.

4.1. Advergames' Objectives

Among the factors that should be considered when conceptualizing advertising strategies for advergames are the objectives of the strategy. When I say the objectives of the strategy, I mean not only the advertising objectives but also the game objectives. Advergames are a form of advertising that because of its interactive nature requires input from active players, who voluntarily approach the game and play it. Therefore, the objectives of an advertising strategy for an advergame should take into consideration not only how to convey the advertising message but also how to motivate players to play the game and how to engage them to keep playing. I will later discuss in depth other elements that motivate players to play the game and keep playing (see p. 160), but in this section I am going to focus on how the objectives of the game and their relationship with the advertising objectives have an important role in that process.

The game and digital communication scholars Jonas Heide and Sine Nørholm Just (Heide & Nørholm Just, 2009) have identified three

[53] These factors are related to characteristics unique to advergames that differentiate them from other types of persuasive games, to players' influence on the interpretation of the meaning authored into the advergame, to players' motivation and engagement, and to the context in which advergames are played. It follows that some of these factors can be used in future analysis as variables for the study of the role of players in the generation of new meaning while playing advergames and of the influence of the context in this process.

possible relationships that can be established between the advertising objectives and the objectives of a game: (1) the game goal and the advertising goal overlap; (2) the game goal and the advertising goal are detached from each other; and (3) the game goal and the advertising goal are somehow related but do not completely overlap.

In advergames in which the game goal and the advertising goal overlap, in order to be successful in the game players need to demonstrate that they understand the advertising message (Heide & Nørholm Just, 2009, p. 59). As I have previously argued, although in educational games, for instance, a complete overlap between the game goal and the learning goal makes sense because it is necessary that after playing the game players have learned the lesson taught within the game, in advergames this overlap is not necessary and in some cases it is even not recommended. One of the central characteristics of advertising communication is that it is typically unwanted communication (Messaris, 1997, p. 5). Therefore, in order to avoid players' resistance the persuasive intentions of advergames should not be obvious.

The overlap between the game goal and the advertising goal can be useful in advergames that want to focus on products benefits, especially when it is possible for the player to interact with a product to understand its benefits. In the case of *Hit it Pure* (Hello Design, 2009) —previously discussed on p.29, if players understand the capabilities of the Callaway Golf drivers, they can perform better in the game. At the same time, they come to appreciate the benefits of the drivers, which is the advertising goal of the game.

However, in advergames whose purpose is to change players' attitudes or behaviors, the overlap between the advertising goal and the game goal does not work in the same way because players can act as if they agree with the point of the game in order to win it without actually changing their beliefs or actions in the physical world. For that kind of games, an alternative relationship between the game goal and the advertising goal could fit better with the objectives of the creative strategy.

Another option is to design an advergame in which the game goal and the advertising goal are detached from each other. This option can be useful when there is no specific information that needs to be understood by the player. An example of this is the advergame *Asylum 626* (B-Reel, Goodby, & Silverstein & Partners, 2009), a scary experience released by

the snacks brand Doritos. In *Asylum 626,* the goal of players is to get out of a psychiatric institution in which they are trapped. The game goal has nothing to do with the advertising goal, which is to bring two Doritos' flavors back during Halloween.

Nevertheless, the bags of Doritos' Halloween flavors incorporated a marker image on the back that allowed players of *Asylum 626* to unlock content in the game. To play the game it was not necessary to have one of the markers printed on the bags, but using them made the experience more immersive and even scarier. Players had to wait until a moment in which the back of a Doritos' bag including the marker appeared on the screen. At that moment, which lasted less than one second, players needed to hold the marker in front of the webcams of their computer. If players were able to do that, they had access to special content. Therefore, the advergame was able to convey the advertising message of making players aware that Doritos' Halloween flavors were back, even when the advertising goal and the game goal were completely detached from each other.

The final option is to design an advergame in which the game goal and the advertising goal are somehow related to each other although they do not overlap. An example of this is the advergame *Get the Glass!* (North Kingdom, 2007), previously discussed in Chapter 1 (see p. 33). The advertising goal of this game is to convey the message that milk consumption brings physical and psychological benefits that impact positively on players' health and social lives. On the other hand, the game goal is to help the Adachi family to steal a big glass of milk, which is protected inside a fort. In this case, the advertising goal and the game goal do not overlap, but they are strongly related. To achieve the game goal the player needs to get the advertising message in order to accomplish the challenges proposed by the game. The advertising goal and the game goal do not overlap but at the same time are strongly related because the storyline of the game presents a narrative fiction in which milk acquires an important role by an hyperbolic representation of a big glass of milk, which is protected in a fort and secured by the police (see Figure 22).



Figure 22. Fort Fridge in *Get the Glass!* with the hyperbolic representation of the glass of milk.

This fictional hyperbolic treatment of the product advertised establishes a balance between the symbolic and denotative representations of milk within the game. This makes that players take in the real information about milk provided within the advergame as part of the narrative fiction and not as a claim about the product, which in turn makes them to let their guard down against the persuasive message. Therefore, although the game goal and the advertising goal do not overlap, they are strongly related because they have in common a protagonist element, which is the product advertised within the game, the milk. This technique allows the advergame to convey the advertising message without using an overly obvious strategy.

In conclusion, in order to set the objectives of a creative strategy for an advergame it is necessary to define the advertising objectives and the game objectives and the relationship between them. Those that aim to provide information about the qualities of a product by letting players interact with it in its natural context should choose design strategies in which the game goal and the advertising goal overlap. On the other hand, for those advergames aiming to change players' beliefs in the physical world, strategies in which the game goal and the advertising goal are detached will work better. Finally, it is also possible to establish

a relationship between game goals and advertising goals in which the two do not completely overlap but are somehow related.

4.2. Integration of Products in Advergames

One of the factors to consider when conceptualizing a creative strategy for an advergame is how to integrate advertised products. The marketing scholar Scott J. Armstrong (2010) has identified five conditions that represent important aspects of the product that are determinant in choosing how products are presented to customers: the benefits, the involvement of the customer with the product, the types of needs the products cover, whether it is a commercial or a pro-social product and whether the customer can evaluate the features of a product before buying it.

To illustrate how these features can influence the advertising strategy of an advergame I will analyze how the product has been integrated in the game *FMX* (Valentin & Byhr et al., 2010) previously discussed in Chapter 1 (see p. 32). The advergame commissioned by Volvo aims to present a new truck model for the construction sector by displaying its benefits in comparison to other trucks. For that purpose, the simulative driving-test experience serves to illustrate how the new model can be useful in difficult situations that drivers confront in the physical world, such as climbing a steep hill. In the case of the steep hill the game shows the player how to use the i-Shift control to let the truck handle the downshift.

Making a decision about buying a truck is a high-involvement situation. In high-involvement situations consumers are more worried about the claims of the advergame than in low-involvement situations, in which they pay little attention (Armstrong, 2010, p. 21). If a player is thinking about buying a truck, which model to buy represents an important decision because the investment is high. Choosing the right model can have consequences for profits, for instance. Therefore, a player who might be interested in buying the new model Volvo truck is probably going to pay special attention to the claims of the advergame.

In the example we are analyzing here, a Volvo truck is a utilitarian product purchased for work needs. Utilitarian products are used to solve problems or to cover basic needs while hedonic products are primarily purchased for enjoyment (Armstrong, 2010, p. 22). In this

case it is logical to think that the customer wants to have all the information possible about the truck before making the decision to buy it.

Furthermore, in this case of the Volvo truck we are faced with a product whose features can be evaluated only after purchase. Only when customers buy the truck and start working with it will they become conscious of the problems it may have or of the benefits it offers in comparison to other trucks they have driven before. Therefore, giving players an opportunity to have a virtual driving experience of the truck might help them to appreciate features that otherwise would not be visible until after purchase. This experience may help them to make their decision feeling that they have more complete information about the truck they are buying.

It follows that the aforementioned characteristics of the product should guide the decision of how to represent the product within the advergame and how the player is going to be able to interact with it. In their research report on advergames, Chen and Ringel (2001, pp. 3-4) identified three levels of product-game integration: associative, illustrative and demonstrative. Associative advergames correspond to those in which the product advertised is not present at all and therefore present the lowest level of product-game integration. At the other extreme, demonstrative advergames correspond to those that are simulations of products or services and therefore present the highest level of product-game integration. Between the two extremes, illustrative advergames are those that present the product but are not a simulation of it. Therefore, the level of integration of the product in this case lies between the two mentioned extremes. However, I see these three levels of product-game integration not as isolated steps but as part of a continuum along which is possible to situate advergames (see Figure 23).

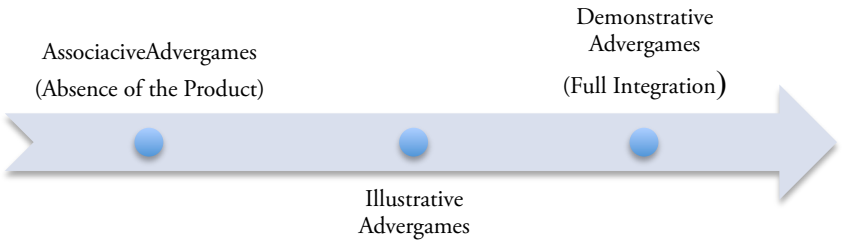


Figure 23. Integration of the Product within the Advergame. Source: Author's Design.

Associative integration occurs when advergames support brand awareness through lifestyle association. Associative integration focuses the advertising message on intangible properties of the products, services or brands advertised, appealing to the feelings or emotions associated with them. It follows that the persuasive dimensions associated with the third level of persuasion are useful for the design of associative advergames. An example of associative integration is *Scorpio* (CLM BBDO & Les 84, 2010), an advergame released to advertise a brand of French perfumes. The game is a suggestive experience through three skill games starring a sensual couple. The associative advergame aims to link the brand with the power of sensual attraction, implying that those who use the perfume will become irresistible to the opposite sex (see Figure 24).

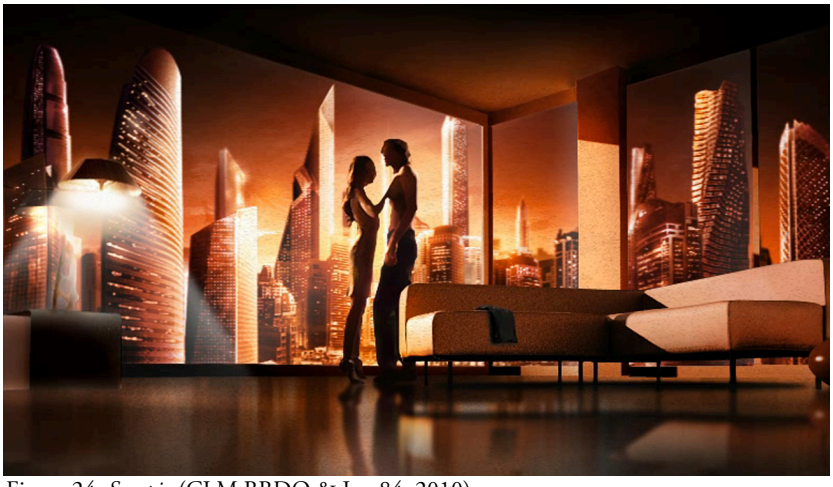


Figure 24. *Scorpio* (CLM BBDO & Les 84, 2010).

Illustrative product-game integration prominently features the product itself in game play. In illustrative advertisements, products or services are contextualized by focusing more on social and cultural context while their features are deemphasized. An example is the fighting theme advergame *Battle of Cheetos* (Goodbye Silverstain & Partners & North Kingdom, 2010). In the game the player has to create an army of Cheetos soldiers and fight for the control of different sites across the web. Sites like Gizmodo, Boing-Boing, Mashable, Digg or Kotaku are the battlegrounds. In this illustrative advergame, Cheetos products come to life to become the main characters of the game (see Figure 25). In this case we are dealing with a low-involvement product; therefore players are not going to be interested in the benefits of the product and are not going to pay attention to the advertising claims. However, the advertisers intended to associate the product with a fun experience. For this reason, the product is integrated into the game not in its natural context but in a funny context that triggers in players the association intended.



Figure 25. *Battle of Cheetos* (Goodbye Silverstain & Partners & North Kingdom, 2010)

Demonstrative product-game integration refers to those advergames that "boost messaging effectiveness by presenting the product in its natural context and inviting the consumer to interact with it" (Chen & Ringel, 2001, p. 4). Demonstrative advertising provides direct information about the nature of a product. This strategy advertises the products' benefits. Demonstrative integration can be seen in *Free your*

dance (Zupa et al., 2010) a game released to advertise Jabra Halo wireless headphones. The game challenges users to a dance competition via webcam wearing wired headphones against a dancer wearing Halos. Based on the performance, users are given a score, one that is never quite as good as it could be using wireless headphones, providing evidence of the feeling of freedom acquired by wearing wireless headphones.



Figure 26. The dancer of *Free your dance* (Zupa et al., 2010) wearing the Halo headphones while dancing.

In conclusion, associative advergames can focus attention on an intangible property of the product or service advertised; illustrative advergames show the product in the game but do not give much information about its nature, just providing indirect information; meanwhile demonstrative advergames allow the player to interact with the product, providing direct information. There are many degrees of product integration along the continuum between these extremes. In order to decide how the product is going to be integrated within the game, the five aspects of the product described at the beginning of this section have to be taken into consideration.

4.3. Advergames' Target

In this section I focus on determining how the selection of the target of the advergame can influence the advertising strategy. For that purpose, I analyze the factors in and out of the advergame that can influence the

interest groups relevant to the brand. I have identified three strands of advergames' target that are important in the process of conceptualization of advertising strategies: (1) their demographic, psychographic, and geographic characteristics; (2) their attitude towards the game; and (3) their attitude towards the advertising message.

The definition of the target in terms of demographic, psychographic, and geographic characteristics is the first strand of advergames' target that should be taken into consideration when designing the creative strategy. The advertising communication scholar Henri Joannis notes that it is important to know about the gender, the age, the education, the location, the spending habits, the product needs and some lifestyle indicators of the target players (1996, p. 19) to define an advertising strategy.

Returning to one of the advergames that have been already mentioned in this thesis (see p. 33), in the case of *Get the Glass!* the target of the game posed a challenge for its designers. The game was aimed at increasing milk consumption among U.S. citizens in general. That means that advergames designers did not have specific psychographic or geographic characteristics to define the game experience. In order to overcome this problem, the designers made two intelligent decisions. The first one was to choose a whole family, the Adachi family, instead of a unique character, to star in the game. The family was composed of four members: a mother, a father, a son and a daughter (see Figure 27). This decision helped to make large segments of the U.S. population feel identified with the game. Secondly, in order to overcome possible problems related to different players' skills, the designers opted for an interface design that simulated a board game (see Figure 28). This type of interface design made it easy for most of the U.S. population to understand how to play the game. Therefore, in this case, taking into consideration the target definition helped to make decisions that would engage a larger group of players.



Figure 27. Adachi Family



Figure 28. *Get the Glass!* simulates a board game.

In order to make decisions related to the target of the advergame, it is also important to anticipate players' attitude towards the advertising message. As I have previously stated, one of the central characteristics of advertising communication is that it is typically unwanted

communication (Messaris, 1997, p. 5). Therefore, players' resistance to persuasive communication is one of the factors that should be taken into consideration when designing an advergame's creative strategy.

According to the communication scholar Paul Messaris, consumers are often armed with 'shields' that usually consist of firm beliefs, rival loyalties or established preferences that they may raise to protect themselves against persuasive communication (p. 8). The author explains that protective shields can be external or internal. External shields are related to people's social attachments to culture, their reference groups, their social class and their emotionally grounded experiences. On the other hand, internal shields are related to people's overall perspective or view of the world, their values, their emotions and their expectations about themselves and their social world. It follows that these 'shields' with which players can confront persuasive communication can affect advergames' effectiveness. Therefore, one of the tasks of advergames' designers is to avoid players' resistance to persuasive communication. In order to address the problem of players' resistance, Messaris states that advertisers can work on advertisements' visibility and credibility (1997, p. 3). In the case of advergames, I state that player's resistance can also be addressed by advergames' playability. In the following sections, I describe in depth how these three features should be considered in the conceptualization of advergames' advertising strategies.

Furthermore, due to their interactive nature, advergames need to entice players to adopt an active stance that differs from the passive attitude of traditional media audiences. Therefore, it is important to retrieve information about their attitude toward digital games in general as well as about their preferences and skills. This will help advergames' designers choose an attractive game concept that encourages the target to play and engages them to keep playing. However, advertisers need to know not only about players' skills or their manifested preferences but also what arouses in them certain feelings or emotions that can create an immediate link between players and brands.

To sum up, retrieving information from the target players can serve not only to define the advertising goals of the advergame but also the game goals and the relationship between the two. In this sense, advergames' designers need to study their target audience not only to choose the advertising message they are going to deliver but also to

decide how to deal with players' resistance. For this task, they need to design a game experience that is appealing and challenging for players.

4.4. Advergames' Visibility

The goal of advergames' visibility is to make players aware of the existence of the advergame, which is the first step in making players want to play it. Advergames' visibility depends on where the advergame is placed and when it is available to be played. As discussed in detail in Chapter 1, the evolution of technologies has enabled the proliferation of different types of advergames that can be played on multiple platforms, such as mobile advergames, online advergames or console advergames and which are also placed in many different contexts, such as game portals, app stores, microsites or banners.

The decisions taken on the form and placement of the advergame have undoubtedly consequences on advergames' visibility, i.e. on players' awareness of its existence. Decisions on visibility may also affect advergame's effectiveness. To illustrate this, let us compare three Volkswagen advergames from 2009 with different forms and placements: *Volkswagen Polo Challenge* (Fishlabs, 2009) a racing game for the iPhone and iPod Touch, *Golf GTI Tracks* (KMF, Artificialduck Studios, Electric Umbrella, & FxLab, 2009) a racing game placed on a microsite online, and *Volkswagen: The New Golf* (Tribal DDB, 2009) a banner puzzle game placed on high-traffic websites.

We can assume that previous beliefs, loyalties or established preferences of players towards Volkswagen's models before playing the game were similar because the three advergames were released in the same year. However, according to the multimedia communication scholar Christina Spurgeon, there are other factors that may have affected players' resistance to advertising communication (2008, p. 29). From the three advergames analyzed here, the *Volkswagen: The New Golf*, placed on banners of high-traffic websites, was presumably the most visible. However, according to Spurgeon, this advertising technique experiences high levels of end-users' resistance to advertising communication (Spurgeon, 2008, p. 29). On the other hand, whereas *Volkswagen Polo Challenge*, the advergame released for the iPhone and iPod Touch, was visible to fewer players, it could avoid players'

resistance to intrusive advertising because players who downloaded the advergame from the App Store did it voluntarily.

Furthermore, the game placed on the banner had to compete against other contents present on the site for players' attention, whereas in the cases of the microsite or the iPhone game, advertisers had total control of the context that surrounded the advergame. Consequently, the latter two did not need to compete against other content on the screen for players' attention. Therefore, those players who found and played these two advergames would probably have a more positive attitude towards their content.

Nevertheless, this is not something that can be generalized because the factors that affect visibility vary from case to case. The point is that, when considering where to place the advergame, one needs to evaluate how visible it is going to be for players and the potentialities and the limitations of the placement selected.

When advertisers opt for placements that are less visible to players, in some cases an advergame's visibility needs to be reinforced by a complementary advertising action taken to make customers aware of its existence. These actions can range from viral advertising actions[54] to big advertising campaigns including TV commercials, for instance. This is a strategy that can be effective when the advergame aims to convey a complex message that provides an amount of information impossible to be communicated by other forms of advertising or which enables an experience that becomes significantly meaningful for customers, bringing an evident benefit to the brand. Therefore, when the placement chosen for the advergame requires an extra effort to provide visibility to it, it is necessary to consider whether the benefit provided by the advergame is worth the investment.

The advergame *Get the Glass!* can again to illustrate this problem (p. 33). This game is part of the bigger advertising campaign *Got Milk?,* with which the California Milk Processor Board aims to increase milk consumption among U.S. citizens. In this case, the advertisers created a

[54] "Viral marketing describes any strategy that encourages individuals to pass on a marketing message to others, creating the potential for experiential growth in the message's exposure and influence. Like viruses, such strategies take advantage of rapid multiplication to explode the message to thousands, to millions" (Kirby & Marsden, 2006, p. 8).

narrative fiction around a family affected by physical and psychological problems due to the lack of milk consumption. This advertising campaign started with a series of TV commercials that presented the history of the family and encouraged viewers to help the members get a big glass of milk guarded in a fort, the Fort Fridge. In order to help the family, customers need to play an advergame placed online on a microsite specially created for it in which they have to accomplish a series of challenges.

In this case, the TV commercials helped to give visibility to the advergame. Furthermore, due to the complexity of the message conveyed through the advergame (see Chapter 1) in this case the strategy was worthwhile. Evidence of the repercussion of this advergame is that it has had more than six million players to date.

In conclusion, one of the main issues in choosing a digital game as a medium for advertising is visibility. Advergames are a form of advertising that sometimes needs extra support to make them visible. Therefore, advergames need to be meaningful and entertaining enough to make the extra support worthwhile for brands and also for players.

4.5. Advergames' Credibility

The marketing scholars Scott B. MacKenzie and Richard J. Lutz define advertisement's credibility as the extent to which the target perceives claims made about the product or brand within it to be truthful and believable (1989, p. 51). An advertisement's credibility can help avoid players' disagreement with the advertising message conveyed (Messaris, 1997, p. 8). Furthermore, the persuasive communication scholar Daniel J. O'Keefe states that credibility is especially important when an advertisement calls for a substantial change in consumers' behavior (1990, p. 194).

According to MacKenzie and Lutz, the credibility of the claims made within an advertisement is a multidimensional construct that depends (1) on the targets' current perception of the truthfulness or honesty of the brand, (2) on advertising credibility, namely target's perceptions of the truthfulness and believability of advertising in general and (3) on the doubts the target can have about the advertisement's claims (MacKenzie & Lutz, 1989, p. 51).

The perceived truthfulness or honesty players already have about the brand is something that advertisers have to deal with when designing advertising strategies for advergames. Depending on the brand's reputation, the objectives of the advergame can be completely different, and therefore, the strategy to follow will also change. The persuasive communication scholars James B.Stiff and Paul A. Mongeau identified three dimensions on which advertising strategies can focus depending on the perceived truthfulness: the process of response shaping, the process of response reinforcing or the process of response changing (2003, pp. 5-9). Taking into consideration Stiff and Mongeau's (Stiff & Mongeau, 2003) claims, response-shaping advergames will be designed to introduce new brands or products to players. In this case advergames' designers cannot count on previous familiarity or loyalty; therefore, redundancy can help with recall and familiarity. An example of a response-shaping advergame is *FMX* (Valentin & Byhr et al., 2010), launched to introduce a new truck model for the construction sector from Volvo (discussed on p. 32). Because it is a new product, the advergame is focused not only on presenting its benefits in comparison with competitors' models, but also on presenting the new model visually, to increase familiarity with the product.

Response-reinforcing advergames are used to increase customer loyalty. In this cases, advertisers can count on players' previous confidence in the brand or the product advertised, and the objective will be to maintain and even increase that loyalty (Stiff & Mongeau, 2003, p. 7). An example of a response-reinforcing advergame is *Asylum 626* (discussed on p. 147). The familiarity and fidelity of players with the brand makes it not necessary to make the product continuously present within the game or to focus on its benefits, and in this case the advergame was focused on delivering a memorable experience.

In addition, response-shaping advergames have the objective of changing players' responses from one position to another (Stiff & Mongeau, 2003, p. 9). An example of a response-shaping advergame is *Get the Glass!*. As previously discussed (see p. 81 of this thesis), the objective of this advergame was to increase milk consumption among U.S. citizens. The Milk Processor Board of California wanted to change players' attitudes and make them choose milk over other drinks. In order to achieve that purpose, the advergame's designers used strong

arguments claiming milk's physical and psychological benefits, which were embedded within the game by making use of a fictional narrative.

The previous information and perceived truthfulness players already have about the brand and the perceptions of the truthfulness and believability they have regarding advertising in general can influence the doubts players can have about advergames' claims. In this sense, advergames have another attribute that can help overcome players' resistance related to credibility. The procedural and interactive nature of advergames allows them to deliver meaningful experiences, instead of just promising them. Therefore, this capacity of advergames can allow them to overcome players' doubts about a product's claims. For instance, in *Hit it Pure* (Hello Design, 2009) (discussed on p.29) the realistic physical settings of the game give the player the opportunity to experience what happens when a golf ball is hit with the FT-iQ and FT-9 drivers in the physical world, which makes it more difficult for the player to refute the claims made about the golf drivers than had they been made through explanatory texts, for instance.

In conclusion, advergames' credibility is a multidimensional construct that depends not only on advergames' claims but also on external factors. As advertising media, advergames possess a series of potentialities that can serve to reinforce players' willingness to trust advergames' claims and thereby avoid resistance.

4.6. Advergames' Playability

Due to their interactive nature, advergames need to entice players to adopt an active stance towards them that differs from the passive attitude of traditional media audiences. Whereas the majority of advertising forms are interruptive, advergames are usually defined as a marketing strategy that operates on pull, which means that it is the player who voluntarily approaches them and interacts with the advertising message (Kempt, 2009, p. 25).

However, simply because an advertising message has the form of a digital game does not mean that it is going to automatically attract consumers to play it. Rather, advergames need to be appealing enough to encourage players to start playing them and engage players sufficiently to keep them playing in order to expose them to the games' persuasive

messages. Furthermore, it is also important to recognize what can make players stop playing games.

What makes players start playing, keep playing or quit playing advergames is related to all the experiences they feel when interacting with the game system. The term playability has been defined to identify and analyze all the attributes of digital games that contribute to this process. The software engineers González Sánchez, Gutiérrez Vela, Montero Simarro and Padilla-Zea state that the term playability is related to the degree to which a game is fun to play and is usable, with an emphasis on the interaction style and plot-quality of the game (2012, p. 1034). Advergames' playability can be measured by the "degree to which specific users can achieve specific goals with effectiveness, efficiency and, especially, satisfaction and fun in a playable context of use" (González Sánchez et al., 2012, p. 1037). González Sánchez et al. identified the attributes of digital games that influence playability as: motivation, learnability, memorability, efficiency, utility and satisfaction. In what follows I analyze how these six attributes can influence advergames' persuasive intentions and therefore should be taken into consideration when designing an advertising strategy for such games.

Motivation

Motivation is the capacity of digital games to encourage players to undertake specific actions and continue undertaking them until they are completed (González Sánchez et al., 2012, p. 1040). Motivation has an important role in making players want to play the game but also in giving them the resources they need to persevere in overcoming new challenges. Motivation is important not only to make players play the game but also to influence their attitude towards the advergame. Players' attitude towards the advergame can influence advergames' credibility, making it easier or more difficult to overcome players' resistance to persuasive communication. Therefore, motivation is an important element to consider in the design of advergames' advertising strategy.

Motivation can be generated in advergames by encouragement, appealing to curiosity or self-improvement, and providing diversity. The degree of player encouragement is affected by the level of confidence felt by players when facing new game challenges (González Sánchez et al.,

2012, p. 1040). This is directly related to the learnability and effectiveness of the game, which are described below.

An advergame that does a great job in terms of motivation is *World's Worst War* (discussed on p. 141). In order to play the game, players needed to buy one of the bags of Tohato snacks in which they found an access code to join one of the two online armies with which they could fight a battle every day at 4 a.m. The fact that they needed to get the access code and the condition to play at night generated an initial curiosity about the game before playing it. Once in the game, players were invited to join one of the two armies and choose their battlefield from thirty-one spots. Moreover, they were encouraged to gain promotion in the army by recruiting friends as warriors under them. The ambition to improve and perform better in the game than their friends and acquaintances motivated them to keep playing (Billich, 2010, p. para 5). Players also had the opportunity to think up and implement strategies with the objective of beating their enemies. The diversity of possible strategies that could be implemented was also a motivation for players, who started to meet up on social networks to set up strategies (Billich, 2010, p. para 7). In conclusion, *World's Worst War* used several techniques to motivate players to play the advergame and keep playing it.

Learnability

According to the researchers in interaction design Yvonne Rogers, Helen Sharp, Jenny Preece, learnability is related to players' capacity to understand what they have to do in the game and understand how to do it (2011, p. 21). An advergame's learning curve must be carefully designed to avoid players' stagnation, and the design of this learning curve may be affected by the nature of the game. Stagnation occurs when "players are playing a game and reach a point where they appear to be stuck, with no way to go on" (Rollings & Adams, 2003, p. 271). While some games put the player on a steep learning curve during the first phases, others games propose a step-by-step learning curve that guides the player for some time. In order to avoid problems related to learnability some advergames' designers opt for game designs that are variations of very popular games, such in the case of *Flip the Mix* (KwelBox, 2002) an M&M's variation of the popular *Bejeweled* (Popcap Games, 2001). The problem of following this strategy is that it may

result in a lack of curiosity and encouragement, thus reducing motivation.

Another advergame which has problems related to learnability is *Scorpio* (discussed on p. 152). The advergame consists of three mini-skill-games. The problem comes when the player realizes that there is little explanation or indication about what to do in each of the challenges. Two of them are intuitive, and it is easy to understand what to do even without any explanations. But one of them is not intuitive at all, and moreover, it gives the player a very limited amount of time to understand how to play the game. If the player does not get what to do within a few seconds, the game finishes and the player needs to play it again. This set-up causes frustration in players who can abandon the game, and it risks linking this frustration feeling to the brand.

There are many solutions to help the player in the process of learning how to play the game, but the important thing to take into account is that the learning curve should be adapted to the skills and expectations of players. A poorly designed learning curve may cause frustration and players' stagnation. Moreover, if the game goals and the advertising goals overlap, a poorly designed learning curve can cause misunderstanding of the advertising message.

Memorability

Learnability is directly related to memorability, which according to Rogers et al. measures how easy it is for players to remember how to play the game once they have learned how to do it (Rogers et al., 2011, p. 21). This is especially important if advertisers expect players to play the advergame more than once, which can be useful in increasing familiarity and recall. Nevertheless, designing an advergame that is easy to learn and easy to remember how to play can in turn create problems in terms of motivation. An example of this is the advergame *Nespresso Variations* (Soleil Noir & Chez Eddy 2010) released to introduce some new flavored coffee capsules for the coffee machine Nespresso. In the game the player has the opportunity to play three different mini-games, each one corresponding to one of the new varieties of coffee. The problem is that the games are very simple to play and do not challenge the skills of the player. This can result in a disappointed player, and, again, this feeling may be linked to the product or the brand advertised.

Therefore, inasmuch as most advergames are designed to be casual games, a good strategy to follow to avoid this problem is to design advergames that are ''easy to learn, but difficult to master'' (Juul, 2010, p. 41). This means that even when the learning process is quick and easy to remember the game should demand that players continually expand their skills in order to progress. This will help to maintain players' motivation during the game session.

Efficiency

Efficiency is related to the way the game supports players in achieving objectives and reaching the final goal (Rogers et al., 2011, p. 21). A good balance between the objectives to be achieved and the challenges to overcome is important to keep players engaged in the game (González Sánchez et al., 2012, p. 1039). Therefore, the structure of the advergame has an important role in its efficiency. This is something that has to be taken into consideration when designing advergames' advertising strategies because it has been demonstrated that when consumers have problems trying to organize complex advertising structures, they retain very little information (Plummer, 1971, p. 322).

Furthermore, advergames' efficiency is directly connected with the concept of meaningful play defined by Salen and Zimmerman to refer to the creation of meaningful game experiences for players (2004, p. 60). Meaningful play occurs when the relationship between actions and outcomes in a game are both discernable and integrated into the larger context of the game. By discernable the authors mean that the player should be able to perceive the result of the game action, and by integrated they refer to the fact that an action performed by a player should affect the whole play experience rather than have only an immediate significance (2004, p. 34-35). Therefore, the creation of meaningful experiences is important for the efficiency of the advergame, which is also related to the effectiveness of the advertising message because supporting players to reach the final goal of the advergame is a way to ensure that they experience the complete branded experience.

An example of an advergame with efficiency problems is *Capri-Sonne Fun World* (Netzbewegung GmbH, 2009) launched to advertise the juice concentrate drink sold in silver pouches Capri-Sonne (Capri Sun). The game presents a playful world that the player can explore by making use of a hang-glider to discover mini-games and activities (see

Figure 29). The problem is that although there are several challenges the player can face, there seems to be no final goal at all. Players have no specific motivation to face all the challenges, and they do not obtain a clear outcome when finishing each of them. Therefore, the relationship between actions and outcomes in a game is neither discernable nor integrated into the larger context of the game. This results in an unstructured advergame that does not support players in achieving objectives or motivate them to complete the whole experience. The design of the game prevents it from becoming a meaningful experience for players, which may have consequences for the effectiveness of the advergame. The lack of structure of the game may result in confused players who spend enormous energies trying to make sense of the whole experience. Such players may not retain the information conveyed through the game.



Figure 29. *Capri-Sonne Fun World* (Netzbewegung GmbH, 2009).

Utility

The utility of the advergame is what allows players to carry out the tasks they have to complete in the way they want (Rogers et al., 2011, p. 21). Therefore, utility is related to players' freedom within the advergame. I have previously stated that constraining players' freedom is not a smart way to convey advertising messages within digital games because this can result in unappealing advergames in which players feel that their performance does not have consequences for the outcome of the game.

Therefore, players' freedom is related to meaningful play and by extension, to advergames' efficiency. Furthermore, utility is also directly connected with diversity, which, as we have already seen, is a way to motivate players.

Satisfaction

Satisfaction is the pleasure derived from playing the advergame or from some aspect of it (González Sánchez et al., 2012, p. 1037). According to Salen and Zimmerman, digital games can provide two different types of pleasure: autotelic and extrinsic pleasures. Autotelic or intrinsic pleasures are those that "are significant only within the artificial meanings that game creates" while extrinsic pleasures "affect player's life outside the game" (Salen & Zimmerman, 2004, p. 360). Given that advergames' goals are focused on affecting players' feelings, attitudes and/or behaviors towards a brand or a product beyond the game (Wright-Isak & Faber, 1997, p. 4), autotelic and extrinsic pleasures can help advertisers to reinforce players' bond with the brand both inside and outside the game.

In its advergame *20 Lives* (Nokia) Nokia followed a strategy that combined autotelic pleasures with extrinsic pleasures. The brand tried to generate extrinsic pleasures by giving physical Nokia devices to the best players in each life, and special prizes for those who collected information from all lives and were able to solve the final challenge. These kinds of outcomes not only reinforced players' bond with the brand but also motivated them to approach the game and return to it in order to improve their outcome.

Satisfaction is also directly connected with the attractiveness of the game, i.e. the capacity of specific properties of the game to arouse interest among players. Moreover, satisfaction is related to the degree of fun experienced by the player. It follows that this is a subjective aspect of playability, very difficult to measure and that depends a lot on players' personal circumstances and preferences.

From the analysis of the six attributes of playability that can influence advergames' persuasive strategy I conclude that playability is not only important in making players want to play the game and make them keep playing, but it also influences players' attitude towards the advertising message. Furthermore, advergames' playability is also related to many factors concerning the advergames' effectiveness. Paying attention to the

six attributes of digital games that influence advergames' playability is therefore crucial when designing advertising strategies for advergames.

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In this chapter I argued that advergames' objectives, the integration of products in advergames, advergames' target, advergames' visibility, advergames' credibility and advergames' playability are the factors that should be taken into consideration when designing advertising strategies for advergames. These factors are not related only to the definition of the advertising message and how it is going to be conveyed but are also related to the problem of how to make players play the advergame, keep them engaged and keep them playing. As explained in this chapter, motivation and engagement are two key factors in advergames' effectiveness because the interactive nature of advergames requires active players who interact with the advertising message.

VARIABLES FOR THE ANALYSIS OF THE ADVERTISING STRATEGY		
ADVERGAME'S OBJECTIVES • Advertising Goals • Game Goals	PRODUCT INTEGRATION • Benefits • High /Low-involvement • Utilitarian/Hedonic • Commercial/Pro-social • Search/Experience/Credence	ADVERGAME'S TARGET • Demographic/ Psychographic/ Geographic Characteristics • Attitude towards the Game • Attitude towards the Advertising Message
ADVERGAME'S VISIBILITY • Where is Placed • When is Placed • Complementary actions	ADVERGAME'S CREDIBILITY • Perceived Truthfulness • Perceived Discrepancies	ADVERGAME'S PLAYABILITY • Motivation • Learnability • Memorability • Efficiency • Utility • Satisfaction

The table above gathers the six factors discussed in this chapter and their constituent aspects that should be taken into consideration in the analysis of an advergame's advertising strategy. This table can be used as a guide for the analysis of the advertising strategy of an advergame.

5. Tem de Tank / A Case Study

In the first chapter of this thesis I proposed a new definition for the term 'advergames'. I also undertook a review of the history of advergamess to analyze the evolution of this form of advertising since its inception and identified the factors that determine advergames' effectiveness. In addition, in the second chapter of this thesis I carried out a critical analysis of previous research on persuasiveness within digital games and proposed a new definition for the term 'persuasive games'.

All the steps above mentioned served to demonstrate that it was necessary to broaden the understanding of how persuasiveness can be implemented within digital games. In order to fulfill this objective, in the third chapter I proposed a new theoretical model for the study of persuasiveness within digital games that can also be used for the implementation of persuasive strategies within digital games. I complemented this theoretical model with the identification, in the fourth chapter, of six factors that should guide the design of advertising strategies for advergames.

In this chapter I use a case study to illustrate how the knowledge produced within this thesis can be employed for the study of persuasive communication within advergames. The game selected for the case study is *Tem de Tank* (DDB Amsterdam & Flavour, 2010).[55] *Tem de Tank* was launched in 2010 by Volkswagen as part of a 360-degree

[55] I encourage readers to play the game before reading this analysis. The game is available to be played here: www.flavour.nl/volkswagen/.

integrated campaign to introduce the Volkswagen Polo BlueMotion. The Polo BlueMotion was designed to be environmentally friendly and was Volkswagen's response to customers' beliefs that the most important issue for the auto industry was tackling environmental issues. The car had lower fuel consumption and CO_2 emissions. The Polo BlueMotion was the first step in the brand's efforts to become the "greenest automaker globally" (Volkswagen Group, 2011, pp. 5-8).

As part of the campaign to introduce this new version of the Polo, Volkswagen launched *Tem de Tank* in Holland aiming to make Dutch players aware about the energy efficiency of the car and also to create awareness of the influence drivers have on fuel consumption. In order to convey the advertising message, the designers created a game in which the player's goal was to drive a Volkswagen Polo BlueMotion from Amsterdam to Milan using only one tank of fuel and to arrive at the final destination with as little combustible material left as possible. In order to do this, the players needed to make a series of decisions that influenced the fuel consumption of the car.

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 that result, from my point of view, in an inefficient game in terms of persuasion. I consider that most of the flaws 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 this method can be useful to identify problems in the persuasive structure of advergames. Furthermore, given the problems identified in this analysis I can suggest small changes to improve the final result of the game.

As explained in the introduction of this thesis, this advergame has been analyzed two times. After the first analysis of the advergame, for which I used a provisional version of the theoretical model, I conducted a personal interview with Jain van Nigtevegt, Creative Director at Flavour, the company responsible for the development of the advergame. In this interview, I had the opportunity to discuss the results of the first analysis with him in order to validate the usefulness of the solutions proposed for the game. During the interview, I also collected valuable information about some decisions concerning the advertising strategy. After this interview and other similar interviews with the designers of other advergames analyzed with the purpose of testing the

validity of the first version of the theoretical model, I came up with the definitive version of the model. Then, I conducted a new in-depth analysis of the game, whose results are presented in this chapter.

This chapter is divided into three parts. In the first part I identify and analyze the advertising strategy of *Tem de Tank* using the six factors identified in chapter 4 (section 5.1.). Then, in the second and third sections, I use the theoretical model presented in chapter 3 to conduct an in-depth analysis of the persuasive structure of the advergame (section 5.2.). First, in the second section of this chapter I analyze in-depth all the persuasive dimensions that have been used within the advergame to persuade players and how these persuasive dimensions have been used to implement the advertising strategy selected for the game. In this section I also identify problems in terms of persuasion and propose solutions for those problems. Then, in the third section of this chapter I identify and analyze the persuasive structure of the advergame as a whole and discuss the problems identified concerning the whole structure (section 5.3.).

5.1. Tem de Tank's Advertising Strategy

In this section I analyze the advertising strategy of the advergame *Tem de Tank* according to the six factors identified in chapter 4. I evaluate the decisions made in the definition of the advertising and game goals, in the integration of the product into the advergame and in the definition of the campaign target. Furthermore, I evaluate the decisions made in terms of visibility, credibility and playability.

Tem de Tank's Advergame's Objectives

In this section I analyze *Tem de Tank's* advergame's objectives, namely the advertising goals and the game goals, and their relationship in the game. Furthermore, I evaluate the decisions made concerning the advergame's objectives, taking into account the campaign goals mentioned above.

On the one hand, the advertising goals of *Tem de Tank* were to make players aware of the energy efficiency of the car and also to create awareness of the influence drivers have on fuel consumption. On the other hand, the game goals were to drive a Volkswagen Polo

BlueMotion from Amsterdam to Milan using only one tank of gasoline and to arrive at the final destination with as LITTLE fuel left as possible.

In this case, designers decided to create an advergame in which the advertising goals and the game goals overlap. The first advertising goal, which is to make players aware of the energy efficiency of the car, overlaps with the first game goal, that is to arrive in Milan using only one tank of fuel. Similarly the second advertising goal, which is to create awareness of the influence drivers have on fuel consumption, overlaps with the second game goal, which is to arrive at the final destination with as little fuel left in the tank as possible. Therefore, in order to succeed in the game players need to understand the advertising message. However, when I played and analyzed the game for the first time I did not realize that the game goal was to arrive in Milan with as LITTLE fuel as possible. Jain van Nigtevegt (personal communication, January 2013), Creative Director at Flavor, explained in the interview we had that the reason for selecting this strategy was to prove the low fuel consumption of the car and to balance the game at the same time. According to him, it is a challenge to arrive with a tank almost empty in Milan because of the car's low fuel consumption. Nevertheless, I consider that this goal is not clearly communicated within the game, and this lack might have generated problems in terms of persuasion. I will discuss this point later in detail.

The decision to create an advergame in which game goals and advertising goals overlap is in this case a good strategy because the advertising goals are not related to changing players' ideas or beliefs but with making them aware of the advantages of the Volkswagen Polo BlueMotion. When the intention is to change players' beliefs, there might be a conflict when game goals and advertising goals overlap because players might act as if they agree with the ideas proposed in the game simply in order to win the game. In *Tem de Tank* the situation is totally different because there should not be any conflict between players' beliefs in the physical world and their getting the advertising message and using the information obtained within the game to win it.

However, the selection of the advertising goals might be detached from the campaign's objectives. The BlueMotion line of Volkswagen was launched with the aim of making VW the greenest automaker globally. Volkswagen's objective is to communicate that BlueMotion

cars are environmentally friendly, and the advertising goals of the game are focused on communicating that the Polo is a low-fuel-consumption car. Yet I cannot find any claim in the game that using less fuel is good for the environment. Even though there is an implicit relationship between the low use of combustible fuel and respect for the environment, the latter is not the focus of the advertising message conveyed through the advergame.

Tem de Tank's Product Integration

In this section, I analyze how the Volkswagen Polo BlueMotion was integrated into the game. Furthermore, I evaluate if the decision made was a good one according to the five aspects of the product that, as explained in section 4.2., are determinant in choosing how products are presented to customers within advergames.

In this section I will take into account the advertising goals pursued by the designers and ignore the goals of the campaign mentioned above. I do this because regardless of whether there is a gap between the campaign's goals and the advergame's goals, the advergame's goals are still related to the benefits of the car and are coherent with the brand and the product advertised. Therefore, my objective here is to evaluate whether the decisions made concerning the design of the advergame are adequate considering the advergame's objectives.

As stated above, one of the goals of the game is to drive a Volkswagen Polo BlueMotion from Amsterdam to Milan. In order to do this, the player has to control a photographic representation of the vehicle along a graphic simulation of the road between Amsterdam and Milan (see Figure 30). To drive the car, players need to use the arrow keys of the keyboard which allow them to accelerate or to turn left or right. Furthermore, using two selectors on the interface players can also decide to use the air conditioning or to open the windows. In addition, by pressing the space bar players can activate the cruise control to control the speed of the vehicle. This advergame, therefore, lies somewhere in between an illustrative advergame and a demonstrative advergame (see Figure 31) because although the car is integrated into the game in its natural context, a road, the game does not allow players to interact with it in the way they would in the physical world.



Figure 30. Photographic representation of the car in a graphic representation of the journey.

On the basis of the above, I claim that in this case the game lies in between an illustrative and a demonstrative advergame, and it takes advantage of both forms of advertising. Demonstrative advertising provides direct information about the nature of a product. An example of demonstrative advertising in the game is the fact that the player needs to complete a driving route using only one tank of fuel by making decisions related to that action in the physical world. The fact that the game is a digital simulation of driving the car introduces elements into the game experience that help to convey the advertising message, such as objects that players need to collect on their way. These elements could not be used in a physical environment.

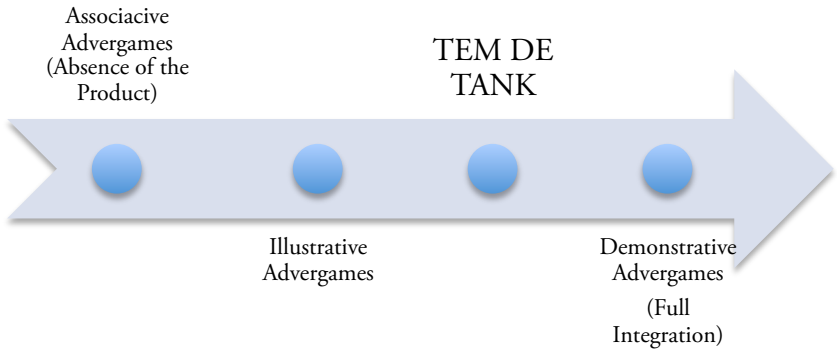


Figure 31. Integration of the Product in *Tem de Tank* (DDB Amsterdam & Flavour, 2010).

In summary, the decisions made regarding the integration of the product into the game are appropriate given the characteristics of the product and help to convey the advertising message.

Tem de Tank's Advergame's Target

In this section I focus on analyzing the adequacy of the advergame in taking into consideration its target. For this purpose, I analyze three strands of advergames' target that influence how players receive the advertising message conveyed through the advergame: (1) their demographic, psychographic, and geographic characteristics; (2) their attitude toward the game; and (3) their attitude toward the advertising message.

The targets of the advergame in this case were young people, especially men, between 25 and 35 years old with an interest in environmentally friendly and fashionable cars with low taxes[56] (Jain van Nigtevegt, Creative Director at Flavor, personal communication, January 2013). According to the Interactive Software Federation of Europe, 8 out of 10 Dutch males between 16 and 35 years old are gamers, and 55% of them usually play online games (ISFE, 2012, p. 7). Compared to other age and gender groups, the target group of the

[56] The game was released in Holland where taxes are lower for cars with low emissions.

advergame analyzed here is the group that plays more games online (2012, p. 9). Therefore, the strategy to select a game to advertise the Polo BlueMotion is a good one given the age and the gender of the target group. It follows that a positive attitude of this target group towards a game as a form of advertising can be expected. However, as I will explain in depth later (see p. 181), the game presents serious problems in terms of playability that might have negative consequences on the final attitude of players towards the advertising message.

Furthermore, even though the designer's target group is young men with an interest in environmentally friendly cars, the game does not include any clear argument related to the benefits of the use of the car for the environment. On the contrary, the advergame is focused only on the low fuel consumption of the car, which is interesting only for those who want to save money on fuel. Although there is an indirect relationship between low fuel consumption and low CO_2-emissions, the latter is not the focus of the advertising message conveyed through the advergame.

In sum, although the strategy of using an advergame to convey the advertising message seems to fit well given the target group, there are problems in the playability of the game that might cause a negative reaction among players towards the advertising message. Furthermore, there is a gap between the definition of the advergame's goals and the definition of the target group.

Tem de Tank's Advergame's Visibility

In this section I analyze the decisions made concerning the visibility of the advergame *Tem de Tank*, namely the decisions made to make players aware of the existence of the advergame. Furthermore, I am going to analyze these decisions according to the advergame's goals.

In this case the brand decided to design an online advergame and place it on a microsite under the domain of Volkswagen.[57] The brand opted to launch its game primarily for the Dutch market. The decision therefore was to launch the game only in Dutch. This decision left out

[57] During the campaign, the game was placed on the microsite www.volkswagen.nl/temdetank/. The game is not available anymore under the domain of Volkswagen; now it is possible to play it on the server of Flavour, the studio responsible for its design: www.flavour.nl/volkswagen/.

non-Dutch speakers, who were not going to play the game even if they had access to it due to language limitations. Furthermore, the game was available only during the one month of the campaign, and it was removed from Volkswagen's domain after that. Additionally, the game took advantage of the total control of the content that a microsite provides and designed a game totally adapted to the advertising goals. All these decisions were appropriate given the objectives of the campaign.

The placement of the advergame on a microsite created a disadvantage concerning visibility and necessitated an extra effort to make players aware of the existence of the game. In order to overcome this disadvantage, the brand decided to publicize the game on the radio and to make use of viral marketing through Hyves and blogs. In less than one month the game was played 170,000 times by more than 100,000 unique players (Jain van Nigtevegt, Creative Director at Flavor, personal communication, January 2013). Therefore, it can be concluded that in terms of visibility the work done was in keeping with the objectives of the campaign.

Tem de Tank's Advergame's Credibility

In this section I analyze *Tem de Tank* (DDB Amsterdam & Flavour, 2010) in relation to the factors that might have affected its credibility, namely the extent to which players perceived claims made about the Polo BlueMotion within it to be truthful and believable. For that purpose, I examine (1) players' perception of the brand's truthfulness or honesty, and (2) the perceived doubts players might have had about *Tem de Tank*'s claims.

Firstly, Volkswagen is a brand with a high reputation, namely "what consumers perceive the brand to stand for" (van Gelder, 2003, p. 107). In 2012 VW was ranked among the top three brands with the highest reputations in the world according to the Reputation Institute, the world's leading reputation management consultancy (2012). It follows that players would have been expected to have a high level of trust in Volkswagen. Furthermore, although the BlueMotion was a new version, the Polo, as a model, has existed for a long time, and it could be expected that its reputation would be linked to the new version of the model. Thus the advergame did not need to make a big effort in

generating familiarity and loyalty for the brand. It follows that the advergame lay in between a response-shaping and a response-reinforcing game because it had to introduce a new version of the Polo and present players its benefits as an energy-efficient car, but at the same time, the advergame could rely on previous customers' loyalty to the brand.

The game promised players that it is possible to get from Amsterdam to Milan on only one tank of fuel by making efficient use of the Polo BlueMotion. I have previously claimed that the procedural and interactive nature of advergames allows them to deliver meaningful experiences, instead of just promising them, which may help to overcome players' doubts about their claims. However, in this case there are some features of the game that might have led players to think that the argument that it is possible to drive from Amsterdam to Milan with only one tank of fuel might be only a promise and not an experience that they could verify in the game.

The game supposedly provides a driving experience in which the consumption of fuel is realistic and calculated according to the performance of the player. However, there are a series of features in the gameplay that are not convincing, which decreases the credibility of the experience. At the beginning of the game, for example, players need to decide with how many passengers they want to travel with to Milan. That decision has repercussions for the consumption of fuel during the journey. However, during the trip, the player can collect or get rid of luggage and passengers with the intention of arriving with as little fuel as possible at the final destination. This is not realistic at all because when people take long trips, they do not collect or get rid of passengers indiscriminately. Furthermore, the player can also collect icons that correspond to weather conditions, thereby influencing fuel consumption; however, in the physical world the weather is not something that can be changed by a driver during a trip. Therefore, the possibility given to the player to control the consumption of fuel with these actions detracts from the credibility of the claim that is possible to drive from Amsterdam to Milan with one tank of fuel, thereby make the game a less than realistic experience.

So, although the game starts from a good position in terms of credibility, some decisions made related to the games' playability do not help to reinforce it. Small changes that are proposed in the section 5.2.

would help to overcome this drawback and to reinforce the credibility of the advergame's claims.

Tem de Tank's Advergame's Playability

In this section I evaluate the playability of *Tem de Tank*, namely the degree to which the game is fun to play and is usable. Therefore, I am going to analyze the game according to the following attributes: motivation, learnability, memorability, efficiency, utility and satisfaction.

In terms of motivation *Tem de Tank* used an appealing strategy to encourage players to join the game. This was the final prize that allowed the three players who performed best during the month the game was available on the microsite to participate in a physical event in which the best of the three won a Polo BlueMotion. Undoubtedly, the possibility to win a car was an important motivation for most of the players not only to play the game for the first time, but also to keep playing to improve their performance. Furthermore, the fact that the final goal of the physical event was the same as the digital game might have also served to motivate players to pay attention to the indications given throughout the game on how to drive efficiently.

However, there are some faults in terms of learnability that might have affected the understanding of the challenge and therefore players' motivation. The first problem is that the challenge of the game is not properly presented to the player before he begins playing it. On the first screen of the game the player reads the following message: "With the Polo BlueMotion you can drive with one tank [of fuel] to Milan. Indeed, arriving on empty is a quite a challenge".[58] With this text the player might have understood that the goal of the game is to arrive in Milan without fuel because that action is presented as a challenge. However, the text immediately continues: "Tame the tank and get to Milan with as little fuel as possible left".[59] It follows that the player might have been confused about the real objective.

Furthermore, the text explaining the challenge appears in a very small font in the upper-left corner of the screen (see Figure 32). Therefore, it

[58] Translated by the author from Dutch into English.

[59] Translated by the author from Dutch into English.

is possible that some players began directly playing without reading the challenge of the game. Since *Tem de Tank* looks like a racing game, the lack of emphatic presentation of the challenge can lead players to conclude that the objective of the game is to arrive at the final destination as quickly as possible. And in fact, it is possible to arrive in Milan without consuming the tank of fuel with this objective in mind. It follows that it is possible to finish the game without understanding the objective of the game. Moreover, at the end of the game there is no clear feedback about the result of the performance. This means that it is possible to finish the game without understanding its goal and thinking that the performance was correct. This major flaw related to the learnability of the game might mean that many players did not get the advertising message at all, even after playing the game more than once.

Furthermore, there are a series of elements in the interface of the game that need to be understood and controlled in order to perform well but also in order to get the advertising message. By making use of buttons in the interface players can control some features that influence fuel consumption. They can decide whether to use the air conditioning, whether to open or close the windows, and whether to use cruise control.[60] The presentation of those elements and what they are useful for is made in a small slideshow on a loading screen before the game starts. This slideshow runs too quickly and the font-size of the texts of the explanation is too small. Therefore, it is really difficult to read and understand the explanations about controlling those elements. Again, this causes problems in understanding how to perform in the game, which also has consequences for the transmission of the advertising message. I would suggest increasing the font-size of the slideshow and making it run slower to give the player time to read the texts.

In addition, I also found problems in the game related to efficiency, namely the way the game supports players in achieving the objectives and reaching the final goal. On the one hand, I think that the goal of the game is well chosen because even if the game is easy to play, the challenge of arriving at the final destination on as little fuel as possible serves to balance the game. Furthermore, the challenge also encourages players to keep playing once they have finished, with the purpose of

[60] Cruise control is a system that automatically controls the speed of the car, thus reducing the consumption of fuel.

improving their result. However, the problems with the presentation of the challenge undoubtedly cause problems of efficiency.

Moreover, there is a serious problem related to the way the player has to interact with the game, which also results in problems of efficiency. Players need to control the car using the arrow keys on their keyboards. However, there are other elements in the game that need to be controlled by players at the same time that they are driving the car. For example, the player is encouraged to open or close the windows, to use the air-conditioning or to choose between different routes during the journey. Surprisingly, the player has to use the mouse to control those elements in the game. I say surprisingly because players usually control the arrow keys with the same hand they control the mouse. Therefore, the game is asking players to lose control of the car if they want to control the rest of the elements in the interface. This is without doubt a serious flaw in terms of efficiency, leading players to focus on control of the car and forgetting about the other options. Consequently, the efficiency of the transmission of the advertising message is reduced because the player does not experience the fuel-consumption consequences of using these features.

These problems might also have consequences for the advergame's utility, namely what allows players to carry out the tasks they have to complete in the way they want. Utility is related to players' freedom within the advergame. In this case although players' freedom is limited, there are a series of decisions that they can make and that have consequences for the final outcome. However, if the players do not understand what they have to do in the game, the utility provided becomes meaningless.

Finally, satisfaction, the pleasure derived from playing the advergame, is a subjective property difficult to evaluate in this analysis. Nevertheless, the strategy of using the physical challenge as a prize for the three best players might have generated extrinsic pleasures[61] for those players who were on the leaderboard during the month the game was online, and for those who finally were offered the opportunity to face the challenge. Therefore, the strategy of the game was able to generate pleasure that could be experienced after playing the game and

[61] Pleasures that "affect player's life outside the game" (Salen & Zimmerman, 2004, p. 360).

that might have had positive consequences on player's lives that they might have linked to the brand.

In conclusion, although the challenge of the game is well designed and there is a balance between the difficulty of controlling the game and the difficulty of mastering the game, *Tem de Tank's* advertising strategy presents serious problems that might have had consequences in the transmission of the advertising message.

5.2. Tem de Tank's Persuasive Dimensions

In this section I analyze how the advertising strategy described in section 5.1. has been implemented within the *Tem de Tank* by making use of the different persuasive dimensions. Furthermore, I evaluate whether the use that has been made of the different persuasive dimensions helps to convey the advertising message, or, on the contrary, if there are contradictions or flaws that may have affected the transmission of the message. The persuasive dimensions considered in the theoretical model described in Chapter 3 but not discussed in this section have not been used within this advergame, namely sonic persuasion, cinematic persuasion, sensorial persuasion, affective persuasion and tactical persuasion. In section 5.3. I will discuss the pertinence of the decisions made in this regard.

Tem de Tank's Linguistic Persuasion

Linguistic persuasion is used within *Tem de Tank* with three purposes: to make players aware about the energy efficiency of the Polo BlueMotion, to create awareness of the influence drivers have on fuel consumption, and to communicate other features of the car. The first two purposes are related to the goals of the game, which facilitates their introduction in the game. However, the third purpose is not related to the game goals, and therefore, it has to be introduced carefully in the game to avoid resistance.

Linguistic persuasion is used to make players aware of the energy efficiency of the Polo BlueMotion in the first screen of the game when the objective is presented. In that screen the player reads: "With the Polo BlueMotion you can drive with one tank [of fuel] to Milan.

Indeed, arriving on empty is quite a challenge".[62] This is the only moment in which linguistic persuasion is used to inform the player that it is possible to drive from Amsterdam to Milan with one tank of fuel. In this case, designers are using inductive reasoning to convince the player that the Polo BlueMotion is an energy-efficient car. Inductive reasoning is facilitated by using as an example a journey that players know is long and making them aware that there is a possibility of completing the whole route on only one tank of fuel. Furthermore, in this case players might have not perceived the argument as an intrusive form of advertising because it is used to present the challenge of the game.

However, there is a problem with how the aforementioned text is presented to the player. As explained above, the text appears in a very small font in the upper-left corner of the screen (see Figure 32) while centered on the screen in a bigger font, highlighted as a button, there appears a text reading "Play the game".[63] It is thus possible that some players did not read the text properly and therefore were not persuaded by the linguistic persuasive message. Because this is an important message and designers have to be sure that players have understood it, repetition should be used to ensure that players get the message. The message should also appear in a bigger font to attract players' attention.

Linguistic persuasion is also used to make players aware about the energy efficiency of the car at other points during the journey. At some points of the trip, the game prompts some questions about the route the player wants to follow. Once the player has selected one of the options, the system prompts a new message in which it explains the benefits of choosing that route related to fuel consumption and the enjoyment of the trip. This system is also used to communicate other features of the car, such as its tight steering.

In this case there are two problems. The first problem is that the text appears while the player is driving the car. At the moment that players see the message, they also see in the background that their car moving on the road. In fact, the background is moving, but the game is paused for a while. That is, there is no possibility for the car to bump into something. However, the moving background makes players feel that

[62] Translated by the author from Dutch into English.

[63] Translated by the author from Dutch into English.

they need to keep controlling the car, so it becomes difficult to concentrate on the question, on the two possible options or moreover on the final explanatory text. The second problem is that the text is quite long and reading it is not useful for the player in the game (see Figure 33). Therefore, it can be perceived as an intrusive persuasive message, which can result in player's resistance.



Figure 32. The objective of *Tem de Tank* (DDB Amsterdam & Flavour, 2010) is presented in small font in a text in the upper-left corner of the screen while there is a button on the center of the screen that encourages the player to start playing.

In addition, the text that is prompted after the player has chosen a route is not adapted to the player's performance. The text always congratulates players on their decision, no matter what the decision is and what their performance has been up to that point. For example, at one point during the journey the game communicates to players that there are road-works on the route they are following and gives them two options: to follow a short route that passes through small villages or to follow the detour route, which is longer. The text that players see if they choose the first option is: "-8 liter diesel. Good choice. Traffic lights are unfavorable for fuel consumption, but thanks to the smart start-/stopsystem of the Polo BlueMotion you can limit the loss." The text that players see if they choose the second option is: "- 4 liter diesel.

Very wise decision. This way you can keep driving at a constant speed, which is good for your consumption."



Figure 33. The text that matters for the player is "- 2 liter diesel", the rest of the text is not useful in the game.[64] Furthermore, the text is too long, and the moving background is distracting.

The reason why both texts are written this way is that they are used in the game only to communicate the advertising message but not to give feedback to players about their performance in the game. This is a flaw; because the system is asking players to make the effort of reading the text, players interpret that reading as providing information needed to understand how to play the game. If the system congratulates players on their decision, they understand that they made a good choice. However, that is not always true because the text prompted is always the same, no matter what the player's performance has been up to that moment. For example, in the aforementioned example, the game should congratulate players if they choose the first option if they have too much fuel left because that option would help them to arrive with less fuel left in Milan. On the other hand, the text should advise them to take care if they are wasting too much fuel because choosing the first option would not help them to win the game.

There is an additional problem with these texts: they provide information that does not match the options provided by the system. For example, in the case I am analyzing here, the game congratulates the

[64] The text says: "Of course! The Gotthard Pass offers you fantastic views over the Swiss Alps. The tight steering makes the ride on the twisting course a real party" (translated by the author from Dutch into English).

player for choosing the first option because it says that it is possible to limit the consumption thanks to the smart start-/stopsystem. However, the game already informs players that the amount of diesel used on that route will be eight liters, so players cannot experience how the smart start-/stopsystem is helping them to reduce consumption.

Consequently, all the above can result in distracted players, who get no clear feedback about the implications of their decisions for the final outcome of the game because they find contradictory information. Furthermore, if players realize that the text is not helping them to improve their performance, they are going to perceive it as intrusive communication, and probably their perception of the advergame is going to change.

Finally, linguistic persuasion is also used in the game to create awareness of the influence drivers have on fuel consumption. In this case, the game uses texts that are presented to players as tips that they can use to improve their performance in the game. Those tips make them aware about the consequences on fuel consumption of using the air conditioning or of opening the windows, for example. This is a good strategy taking into consideration the advertising goals and the game goals. The texts can help players improve their performance in the game and at the same time serve to transmit the advertising message. However, again I find problems in the way the texts are presented to players. The texts appear in a small font in the lower-left corner of the screen and only for a few seconds. This makes it difficult for players to read them because players need to concentrate on controlling the car at the same time. Furthermore, the texts are written in white, and sometimes it is difficult or even impossible to read them depending on the background. In some specific moments, for example, there are white clouds that pass under the texts that make it totally impossible to read them (see Figure 34). Given that the texts appear only for a few seconds, some tips are totally missed because of this.



Figure 34. In this screenshot it is possible to appreciate how the clouds keep players from reading some tips.

I would suggest changing the way the tips are introduced and making them appear in relation to players' performance. For example, if players are wasting too much fuel the game would prompt a message warning them about this fact and suggesting a solution. This would reinforce the advertising message but also make players more aware about their performance and how it can be improved. The tips would thus become more meaningful for players who would probably then pay more attention to them. Given that the attention of players is focused on the top of the screen, because they are concerned about what comes next, I would also suggest changing the position of the tips to the upper-right corner (see Figure 35).



Figure 35. Design solution for the introduction of tips.

In sum, linguistic persuasion is used in *Tem de Tank* to persuade players in keeping with the advertising goals of the game. In this case, linguistic persuasion is used only to construct direct arguments and connotative meanings of words and/or phrases and is not used to generate emotions in players or to guide players' interpretation. Furthermore, there are some problems related to how texts are presented to players that may result in players not getting the message conveyed or perceiving some texts as an intrusive form of communication.

Tem de Tank's Visual Persuasion

Visual persuasion is used within *Tem de Tank* with two purposes: to enhance the designs of the Polo BlueMotion and to make players aware of the influence drivers have on fuel consumption. The most salient decision related to visual persuasion within the game is the introduction of a photographic representation of the car while the rest of the elements of the game are part of a 2D graphic design. This decision has two positive consequences in terms of persuasion. The first consequence is that the difference in the visual presentation of the car draws players' attention to the vehicle. The second consequence is that the player can have a clear idea about how the car looks in real life.

Since the target for the designers includes young men interested in fashionable cars, the design of the car becomes an important feature to be presented to players. In this case, players have the opportunity to see three photographic images of the Polo. The first image is placed on the home screen in which the challenge of the game is presented. On that screen the car appears large, centered on the screen, drawing players' attention to the vehicle (see Figure 32).

The second image is placed on the screen in which players can decide how many passengers they are taking with them on the trip. In this screen players can see a new photograph of the car in which it is seen from behind with the doors open (see Figure 36). Again, the car appears large, centered on the screen, drawing players' attention to the vehicle. Given that the screen is focused on choosing passengers for the trip this would have been a good opportunity to present the interior of the car and/or the size of the trunk of the car.



Figure 36. In this screen players can see the car from the behind.

Finally, the third image is the car that players can drive in the game. In this case players can see the car from above, and it appears in a small size on the screen (see Figure 33). Therefore, players do not get extra information from this, but it helps them to keep in mind the information that they got from previous images.

Visual persuasion is also used in the game to make players aware about of the influence drivers have on fuel consumption, for instance in the visual design of the suitcases and the passengers that players can collect along the journey. This feature was designed to make players aware about the influence that weight transported has on fuel consumption. Players can pick up new passengers or suitcases by collecting iconic representations of them with a "+" symbol, and they can get rid of passengers and suitcases by collecting iconic representations of them with a "-" symbol. Furthermore, "+" signs are represented in red and "-" are represented in green (see Figure 37). By convention, red is associated with wrong actions while green is associated with good actions. The objective of using the red and green colors for these visual signs is to convey the advertising message that collecting red passengers and luggage is a negative decision in terms of fuel consumption while getting rid of green passengers and suitcases is a good decision to save fuel.



Figure 37. In *Tem de Tank* (DDB Amsterdam & Flavour, 2010) players can increase or decrease the number of passengers or pieces of luggage on their way to Milan by collecting red and green symbols.

However, the visual design of the signs is quite confusing given the purposes of the game because the objective is to arrive in Milan with as little fuel remaining as possible. Therefore, when the player has too much fuel left, picking up a new piece of luggage can be a positive and not a negative action. The use of the green and red colors in this case might have caused confusion because the colors are related only to the communication of the advertising message but not to the goals of the game. Consequently, some players might have been distracted by the use of these colors.

Finally, there is also a problem with the visual design of the "actieradius meter", (see Figure 38) an element designed to serve as an indicator of the players' performance regarding fuel consumption, supposedly helping them to have an idea whether they are wasting too much fuel or not consuming enough fuel according to the challenge. However, the visual design of this meter makes it difficult for players to decipher the information provided by it. Players are supposed to keep the pointer in the blue zone to achieve the best performance, but it is quite difficult to decipher what is going on when the player is not in the blue zone. At the two extremes of the meter there are two indicators: one that says "+100", which supposedly warns players that with the fuel left they can ride 100 kilometers beyond Milan; and another one that says "-100", which supposedly means that they are going to run out of fuel 100 kilometers before arriving in Milan. However, the arched

representation and the use of the same color --red-- on both sides of the meter does not provide players quick feedback on what is going on.



Figure 38. "Actieradius meter"

A solution for a design of the "actieradius meter" could be to create a vertical meter in which the center represents arriving in Milan with as little fuel remaining as possible. In this representation players could see how the level of fuel goes up in a green color when they drive with too much fuel left and the level of fuel goes down into a red color when they are wasting too much fuel (see Figure 39 and Figure 40). The colors would increase and decrease in such a way that when the players see the red color they would understand that they are wasting too much and when they see the green color they would understand that they have a lot of fuel left. This design would help players to quickly grasp the meter's message just by identification of the colors. At the same time, it also would link the meter with the advertising message because the green color would mean getting to Milan on only one tank on fuel. This means that even players not on the high-score table would be able to finish the game.



Figure 39. The new "actie radius" would show the level of fuel rising in a green color when players are driving with too much fuel left.



Figure 40. The new "actie radius" would show the level of fuel descending in a red color when players are wasting too much fuel.

Moreover, this new design of the "actieradius" would give sense to the color code used in the items the player needs to collect during the journey. As explained before, items are designed in two colors, green and red, with green meaning that they are saving fuel when collecting them and red that they are wasting more fuel when collecting them. With this design players would also understand that collecting green items increases the level of the "actieradius" and collecting red items decreases the level of the "actieradius". Therefore, the color would be linked not only to the advertising message but also with the game goal.

In conclusion, visual persuasion is well used to present the visual design of the car to players. However, the use of visual persuasion to make players aware about the influence drivers have on fuel consumption might have not worked in the way intended. The problem is that the design was focused only on conveying the advertising message and paid insufficient attention to the consequences it could have on how players interpret the signs and their implications for the game.

Tem de Tank's Haptic Persuasion

Haptic persuasion is used within *Tem de Tank* only with the purpose of presenting the benefits of the cruise control of the Polo BlueMotion and the consequences of weather circumstances on the vehicle's control and fuel consumption. Cruise control is a system that, when activated, automatically controls the speed of the car, and thus reduces fuel consumption. Using cruise control also increases driving comfort

because the player does not need to worry about pressing the accelerator pedal. Activating cruise control is as simple as pressing a toggle button.

In the advergame, the player can activate the cruise control of the Polo BlueMotion by pressing the space bar, which is as simple as pressing the toggle button while driving. After activating cruise control, the player can forget about pressing the up arrow key, which is used to accelerate the car. Thus, controlling the car in the game becomes easier.

Through the activation of cruise control and the interaction with the car through the use of the keyboard, players understand that activating cruise control in a car in real life is simple and can increase driving comfort. However, there is no clear feedback about the influence of the use of cruise control on the reduction of fuel consumption. The use of cruise control has influence on the final score, yet when the player decides to activate cruise control, there is no direct feedback about the consequences of this action. In this case, I would propose adding a prompt message placed in the upper-right corner of the screen that would use visual information to convey that using cruise control saves fuel. For this purpose I would use the "actieradius" with a green arrow pointing upwards (see Figure 41). This could be quickly interpreted by players who would already know that green is associated with actions that save energy and who would also know that increasing the level of fuel saved may cause them to arrive in Milan with a combustible excess.



Figure 41. When cruise control is activated the system should prompt a visual message showing the "actieradius" with a green arrow pointing upwards.

Haptic persuasion is also used when the player collects the signs that represent different weather conditions. For example, downwind causes acceleration in the car, rain causes deceleration and snow causes loss of control. However, these changes in speed and control are not obvious and might not be perceived by every player. In addition, when a sign is collected, this sign appears in the lower-right corner accompanied by a message that includes a number of kilometers. I suppose that this number corresponds to the number of kilometers' difference that the weather condition makes to the distance the driver can drive, but this is not clear and a little bit confusing (see Figure 42). In order to improve the feedback given to players about the consequences of weather conditions I would suggest prompting a message similar to that proposed above for the cruise control system, in which the system would alert the player, for example, that upwind causes an increase in fuel consumption (see Figure 43). This solution would help to make players aware about the influence of weather conditions on the car's performance.



Figure 42. Actual feedback when collecting weather icons.



Figure 43. Design proposal for feedback when a wind icon is collected.

To conclude, the use of haptic persuasion within the game is coherent with the advertising message and can be useful to convey it. However, its effectiveness could have been improved by complementing it with visual and linguistic signs that would have helped interpret haptic signs and increase their effectiveness.

Tem de Tank's Procedural Persuasion

Procedural persuasion is used within *Tem de Tank* again with the purposes of making players aware about the energy efficiency of the Polo BlueMotion and to create awareness of the influence that drivers have on fuel consumption. I am going to divide the analysis of the use of procedural persuasion into four parts according to the four different rule types that is possible to find within digital games: (1) goal rules, (2) grade rules, (3) meta-rules, and (4) model rules.

The goal rules define the stated aims that lead to victory. In *Tem de Tank*, the objective is to drive the Polo BlueMotion from Amsterdam to Milan on only one tank of fuel. Those players that use up the tank of fuel before reaching Milan lose the game. This goal rule helps designers to convey the message that the Polo BlueMotion is an energy-efficient car. However, as explained above, the form of presenting the game challenge is not ideal because the text is written in such a way that is not clear whether the final goal is to reach Milan with as little fuel as possible or with an empty tank. In fact, only those players who run out of fuel during the trip read a message that clarifies this objective, by

communicating to those players that they have lost because they have run out of fuel.

The grade rules deal with any characteristic that is measured within the game. In the case of *Tem de Tank* the most important grade rule is the level of fuel left at the end of the trip. The game established that the three players who arrive in Milan with the least amount of fuel left would participate in a real competition of a similar nature. This grade rule became persuasive because it was designed to make players aware about their influence on fuel consumption. In this case, the grade rule guides players' interpretation of the visual design of the "actieradius" designed to give players feedback about the consequences of their performance in the game. However, I suggested some changes in the way this element is presented to players in order to improve the quality of the feedback and therefore facilitate the transmission of the advertising message.

Meta-rules define how the players can customize their own preferences. Players of *Tem de Tank* were provided with a series of elements that they could collect or modify in order to influence fuel consumption. This included collecting or getting rid of passengers and suitcases during the journey, the activation of the air conditioning, the use of the windows, the use of cruise control, and the collection of forecast signs that had consequences for the weather during the trip. All these elements are introduced into the game by making use of linguistic, visual and haptic persuasion, and their interpretation is guided by the rules of the game. Only when players experience the consequences of activating the air conditioning, for example, does the sign that represents it become meaningful for them and convey to them the advertising message.

Regarding the items that players can collect during the trip, I have already discussed the problems that I find with the visual design of passengers and suitcases. I have also explained that collecting and getting rid of passengers and luggage during a long trip is not a realistic occurrence, and thus it is a game feature that does not help the credibility of the advertising message. Furthermore, I have also stated my concern about the difficulty of controlling the car whilst paying attention to other elements such as the air conditioning and the windows.

Since players can decide at the beginning of the trip how many passengers and suitcases they want to travel with, I would suggest removing the possibility of collecting these elements during the trip. Instead, I would replace those elements with other signs that represent the windows and the air conditioning (see Figure 44). The resulting experience would be more realistic because switching the air conditioning on and off and opening and closing the windows several times during a journey are realistic options that have consequences for fuel consumption. At the same time, I would remove the actual controllers for the air conditioning and the windows, thus improving playability.

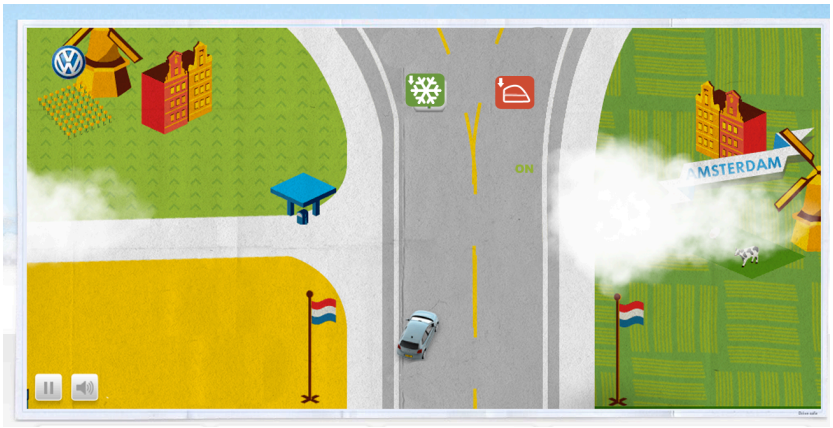


Figure 44. Design proposal for the replacement of passenger and suitcase collectibles with air conditioning and window collectibles.

Furthermore, the weather is also something that cannot be controlled by players. For this reason and in order to improve the credibility of the advergame, I would suggest removing the possibility of collecting weather signs during the trip. I have also noticed that although at some points during the journey the roads splits and the player has to decide which way to follow, there are no direct consequences of choosing one route over the other. At least, there is no feedback about the consequences. I would therefore suggest adding signs indicating the weather forecast for the different routes the player can choose during the journey. Even if it is not normal to find weather signs on the road, the forecast for different routes is something that can be

checked by drivers. Therefore, this solution is more realistic than the actual one and could serve to give credibility to the advertising message.



Figure 45. Design proposal for the replacement of the weather collectibles with weather signals for the different routes.

Finally, model rules define how the playworld works and therefore set the boundaries of players' activity. In *Tem de Tank* model rules are used with persuasive intentions associated with the weather conditions. When players drive in the rain the speed of the car is reduced, and when players drive in the snow there is also a maximum speed at which they can drive. However, while playing the game the difference is almost unnoticeable. Therefore the effectiveness of this model rule can be questioned.

In conclusion, although *Tem de Tank* makes use of goal rules, grade rules, meta-rules and model rules with the intention of persuading players and guiding their interpretation of the signs they find during the game session, the fact is that there is a lack of understanding of how the persuasive message should be embedded using procedural persuasion. This causes playability to be sometimes neglected in favor of the advertising message, which results in misunderstandings and the loss of credibility.

Tem de Tank's Narrative Persuasion

In *Tem de Tank* narrative persuasion is used to reinforce the advertising message communicated through other persuasive dimensions and as an excuse to introduce new arguments about other features of the Polo

BlueMotion. As I have previously explained, there are three moments during the trip in which the game prompts a question about the route the player wants to follow. When the player has selected an option, a new message appears explaining the benefits of having chosen the selected route. I have already highlighted some problems related to this strategy, and now I want to link those problems with a misuse of narrative persuasion.

In this case designers opt for making use of scripted narrative to introduce the aforementioned arguments. For example, the second question tells players that a truck has lost its load of 30,000 eggs, creating a ten-kilometer traffic jam. The game then offers the player two options: to have a break and eat an apple tart or to continue on the road but drive slowly. If players choose the first option, the game prompts a message alerting them that they are going to use four liters of fuel and makes them aware that the integrated navigating system of the car will help them to come back to the main route after a while. On the other hand, if players choose the second option, the game prompts a message alerting them that they will use two liters of diesel and makes them aware that the seats of the Polo BlueMotion make it really comfortable for them to be waiting in a traffic jam.

However, right after players have taken their decision, they can continue driving the car on an empty road with no changes at all. Thus, even if they have chosen to continue driving they do not encounter a traffic jam or eggs on the road. The scripted narrative is obviously used to introduce the advertising message, but there are flaws in the way the advertising message is introduced. If players cannot see in the game the benefits of the comfortable seats or the navigating system, they are going to perceive the message as an intrusive form of persuasion. In this case the use of scripted narrative is not enough to avoid player's resistance.

In conclusion, in this case I think that there are only two effective solutions. The first would be to remove these three questions from the game and forget about introducing information about other features of the car. The second solution would be to introduce new features into the game which would allow players to see the consequences of their decisions on the driving experience and, moreover, to use the features of the car in the game.

Tem de Tank's Social Persuasion

In *Tem de Tank* I have identified an attempt to use social persuasion. However, the strategy followed to make use of this persuasive dimension in the game does not work as intended, as I explain below.

At the beginning of the game players needed to decide upon the number of passengers in the car and the number of pieces of luggage. At this point, players had the possibility to login with their Hyves[65] account and to choose a maximum of four friends to become passengers on the trip. However, the connection with the Hyves account can be skipped, and the player can occupy the seats with anonymous passengers. At this point there is no explanation of the benefits of using real friends to occupy the seats, but previous experiences would make players think that choosing their own friends would result in cool stuff including pictures of all of them, for example. However, none of these possibilities happens; in fact, the game does not include any other reference about players' friends, not even when the game is finished. Furthermore, during the trip players discover that they can get rid of the passengers they are taking with them and that they can collect new anonymous passengers.

Consequently, players' expectations are raised but are ultimately unfulfilled. This means that the positive attitude aroused in players towards the advertising message might have been transformed into disappointment that might have ultimately been linked to the advertising message. The problem with this strategy is that it has been designed to become meaningful only for the brand, not for the player. The objective of encouraging players to invite their friends via Hyves was to make them give Volkswagen access to their data on the social network. However, this action was not meaningful for players, and thus they might have felt cheated. A solution would be to offer players the possibility to take the selected friends with them if they get to participate in the real event.

In conclusion, the use of social persuasion should be designed not only to become meaningful for the brand but also for players. Otherwise players may feel coerced to share personal information for no reason, which can discourage players from playing the game.

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[65] Hyves is the most popular social network in Holland.

5.3. Tem de Tank's Persuasive Structure

After analyzing all the persuasive dimensions of *Tem de Tank* I conclude that the persuasive structure of the game is composed of seven persuasive dimensions (see Figure 46).

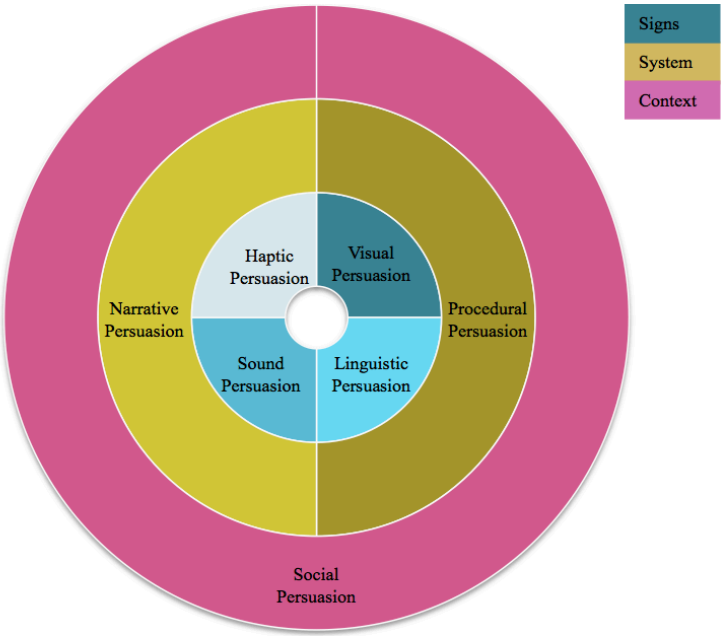


Figure 46. Persuasive structure of *Tem de Tank* (DDB Amsterdam & Flavour, 2010).

By analyzing the persuasive structure and also by taking into consideration the flaws in the use of the different persuasive dimensions, I can conclude that the lack of understanding of how digital games can be used to persuade players resulted in a persuasive structure in which the second and third levels of persuasion are wasted. Most of the problems in the design of the persuasive structure of *Tem de Tank* come from a strategy that establishes a clear relationship between game goals and advertising goals but that ultimately does not result in a gameplay in which all the elements and the relationships between them are in keeping with both sets of goals at the same time. This might have been the result of thinking about the design of those elements in isolation while ignoring the possible meanings of the relationships between them.

There also seems to be an ignorance or disinterest in the persuasive potential of the third level of persuasion.

The result is an advergame which had great potential to become effective in terms of persuasion but that might have become meaningless for a lot of its players. When I say that it had great potential to become effective I mean that the starting points were all in favor of the brand. VW's credibility is high, the target is the ideal one to whom to convey an advertising message using a digital game, and the advergame's goals were perfectly designed to convey the advertising message. Furthermore, the quality of the visual design of the game might have also aroused positive feelings toward it. Finally, the possibility of winning a real Polo BlueMotion was the perfect motivation to attract players to play the game.

However, multiple oversights in the design have resulted in a game that might not have achieved the purpose of conveying to players the influence drivers' performance has on fuel consumption. There is a chance that some players might not even have recognized the energy efficiency of the car. The advergame might have been beneficial for VW through increasing brand recall, and some players might have had a positive memory of the game thanks to the physical challenge which came out of it. However, ideally advergames should work without any prize promised after the game because having fun playing them should be enough reward for players. If players play an advergame unwillingly and only attracted by the final prize, the persuasive potential of digital games is being neglected.

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In this chapter I discussed the results of an in-depth analysis of the advergame *Tem de Tank* with the objective of demonstrating the usefulness of the theoretical method presented in this thesis. It can be concluded that this case study shows that a detailed analysis of each of the persuasive dimensions and of the persuasive structure of an advergame can allow problems to be identified which might have gone unnoticed at first. Therefore, this example also demonstrates that the theoretical model and the six factors that should guide the design of advertising strategies for advergames proposed in chapters 3 and 4 facilitate the study of advergames' persuasive structures.

Conclusions

The aim of this study was to determine how digital games can be designed to convey advertising messages that are meaningful from both the brand's and the player's perspectives. One of the most significant contributions of this project, which is directly linked with the main purpose of this dissertation, has been the development of a new theoretical model for the study of how persuasive messages can be conveyed through digital games. This theoretical model can identify specific aspects of advergames' persuasiveness that might not be obvious at first glance by giving them order and conferring on them intelligibility. Through this model I have structured important theories from different fields and explained how these theories can be used to convey persuasive messages through digital games. It follows that the findings of this study help to broaden the understanding of how digital games can be used and designed to convey advertising messages.

The purpose of the first chapter was to provide an accurate definition for the term *advergame* and identify factors that determine advergames' effectiveness (RQ1). A critical review of previous definitions proposed by other scholars for the term has shown that there was not a clear understanding of the object of study of this dissertation. Therefore, I proposed my own definition for the term in which I state that an advergame is a digital game specifically designed for a brand with the aim of conveying an advertising message. This new definition for the term serves first to acknowledge that as digital games, advergames are procedural, spatial, interactive, encyclopedic, and networked

environments. Thus, these features can be used to convey meaningful branded experiences through digital games.

Furthermore, the new definition serves to differentiate advergames from commercial digital games in which advertising techniques are used to promote products or services. In the definition I specify that advergames are specifically designed for a brand, which implies that the whole experience can be designed with the purpose of conveying the advertising message. This suggests that it is important to acknowledge how a whole digital game can be designed with such a purpose. In this regard, I pointed out that due to the interactive nature of digital games, in advergames the communication process is bidirectional and that players are co-authors of the advertising discourse. We must therefore take into consideration that players' performance can have an important role in the way they interpret the meaning authored into the game.

With a clear definition of the concept of advergames and after having established the differences between this kind of game and other digital games with advertising intentions, I carried out an analytical review of advergames' history. In this critical review I found that while the first advergames designed in the early 1980s used innovative techniques to embed advertising messages, the 1990s was not an innovative time for this marketing strategy. Furthermore, despite the rapid development of technology since then, giving rise to many different forms of advergames with characteristics that could convey advertising messages, these new features are in many cases not always exploited or properly used. The results of this analytical review of advergames' history suggest that these features are not always exploited and are sometimes poorly utilized because of a lack of understanding of the medium. It follows that this dissertation can serve to enhance the quality of future advergames.

In Chapter 1 I also identified five recurrent criteria considered by professionals when measuring advertising effectiveness: the campaign objectives, the background situation, the creative strategy, the media strategy and the evidence of the results of the campaign (1997, p. 12). I analyzed these five criteria in relation to advergames. This study has shown that of the five criteria in which advertisers can work to improve advergames' effectiveness, the creative strategy is the one that differs most in comparison with other media. The creative strategy determines what the advertising message will say and how the strategy will be executed. In order to decide how the creative strategy will be executed

when using a digital game as a medium for advertising, it is necessary to understand the medium and to acknowledge which of its elements can be designed to convey the advertising message. It follows that this dissertation can contribute to improving future advergames' effectiveness and can be useful for studies trying to asses advergames' effectiveness.

The purpose of the second chapter was to understand how the study of persuasive communication through digital games should be approached (RQ2). In order assess this issue, and due to the high relevance of the procedural school to the study of digital games' persuasiveness, I conducted a critical literature review around Bogost's arguments in which I used the shortcomings found by other scholars to inform my claims. The evidence from this critical review suggests that procedural rhetoric should not be seen as a communicative revolution and the unique persuasive domain available within digital games but as a strategic option that could be useful for some purposes, but not for others, and like other persuasive forms, it may hold a potential that is not always fully realized. Furthermore, this critical review has shown that Bogost's (2007) approach neglects players' creativity and forgets that player choices can lead to a manipulation of the dominant rhetoric intended by the game designer.

The main contribution of this chapter is the suggestion of a new approach to study how persuasive messages can be conveyed through digital games. I suggest that the study of how persuasive messages can be conveyed through digital games should be addressed by taking into consideration that multiple persuasive dimensions can be used within digital games to persuade players. Furthermore, I claim that the use of multiple persuasive dimensions can facilitate the design of persuasive games that respect players' creativity and provide freedom to the player to experience unique and unrepeatable experiences as a result of their own performance. Accordingly, I have proposed defining persuasive games as digital games that aim to shape, reinforce or change the perceptions, emotions, beliefs, behavioral intentions and behaviors of players.

In the third chapter of this thesis I investigated how persuasive messages can be conveyed through digital games (RQ3) and presented a theoretical model for such study. This theoretical model relies on Salen and Zimmerman's (2004) statements to explain how digital games can

convey meaning through three different levels of persuasion: (1) the signs embedded within the game, (2) the system that allows players to interact with the signs of the game and (3) 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. Another important contribution of this chapter is the identification of eleven persuasive dimensions that can be used to persuade players through digital games. The identification of these persuasive dimensions and the description of how these persuasive dimensions can be used within advergames to convey advertising messages are of special relevance to understanding how digital games can be designed to convey advertising messages.

The purpose of the fourth chapter was to identify the factors that determine the conceptualization of persuasive strategies for advergames (RQ4). The contribution of this chapter was the identification of six factors that should be taken into consideration when designing an advertising strategy to be implemented within a digital game: goals, product integration, target, visibility, credibility and playability. This chapter provides the necessary knowledge for the study and conceptualization of advertising strategies for advergames. The value of this contribution is related to my claim that *advergames* have special characteristics that differentiate them from other types of persuasive games. It follows that an understanding of these traits that differentiate advergames from other types of persuasive games is necessary to choose the advertising message to be conveyed and how to integrate it within a digital game, which relates to advergames' effectiveness.

In the fifth chapter, I applied the theoretical model proposed in this thesis to an analysis of the advergame *Tem de Tank* (DDB Amsterdam & Flavour, 2010). This analysis has shown the usefulness of the theoretical method presented in this thesis. It can be concluded that this case study shows that a detailed analysis of each of the persuasive dimensions and of the persuasive structure of an advergame can identify flaws in the use of the different persuasive dimensions of the game that might have otherwise gone unnoticed. Consequently, this analysis serves also as an illustration of how a lack of understanding of how digital games can be used to persuade players can result in an advergame that, despite having everything to become effective in terms of persuasion, may become meaningless for many players who have played it.

Therefore, this example also demonstrates how the theoretical model and the six factors that should guide the design of advertising strategies for advergames proposed in chapters 3 and 4 facilitate not only the study but also the design of advergames.

Hence it can be concluded that the research performed for this dissertation has served to broaden the understanding of the connections between the basic properties of digital games and the multiplicity of advertising techniques that can be implemented within them. Although further research will be needed to better understand the effectiveness of the use of the different persuasive dimensions, this dissertation has served to demonstrate that a better understanding of how digital games could be used to convey advertising messages can improve the study and conceptualization of advertising strategies of advergames.

Directions for Further Research

During the writing of this dissertation I have discovered several interesting directions for future work that I would like to discuss here as evidence of the research paths opened through the research process. In this thesis, I have subscribed to the idea that players generate the final meaning of a play experience while they play a particular digital game in a given context. However, due to time limitations I have focused my attention only on studying how digital games can be designed to convey meaning and how affordances of the game invite specific players' performances. It follows that further research can use the knowledge produced within this thesis to study how players generate new meaning while playing persuasive games and therefore, the role of players' performance in the process of persuasion. Furthermore, the knowledge produced within this thesis can be also used to test how the context of playing can transform the meaning authored into digital games

Furthermore, in the fourth chapter I identified six factors that determine the conceptualization of creative strategies for advergames. This allowed me to recognize which characteristics of advergames need to be considered for the conceptualization of creative advertising strategies. The factors that determine persuasive communication within advergames are related not only to the way the advertising message should be conveyed but also to how the game motivates players to play

it and how it engages them to keep playing. Further research on each of these six factors would help in understanding their influence on the transmission of the advertising message. Due to the diversity of persuasive possibilities that can be implemented within digital games, conducting research on design processes in which advergames' strategies could be implemented given specific objectives should produce more valuable insights about the persuasive potential of the different persuasive dimensions discussed here.

In the fifth chapter of this thesis I identified all the persuasive dimensions that can be used within the three levels of persuasion of digital games to convey advertising messages and justified the selection of each one of them. Furthermore, I enumerated the most significant ways in which each of these persuasive dimensions can be used within advergames to persuade players and illustrated these uses with examples. However, further research on each of the persuasive dimensions could be helpful to better understand their individual persuasive potential. Future study of each of the persuasive dimensions should analyze the effects of the intentional manipulation of specific elements of digital games or relationships established within them on the transmission of the advertising message. This would provide a better understanding of the implications of each of the persuasive dimensions on advergames' effectiveness.

Additionally, I have suggested that the theoretical model proposed here can be useful for the implementation of advertising strategies within digital games. I have justified this by arguing that the theoretical model presented in this thesis serves to give order to and confer intelligibility on specific aspects of advergames' persuasiveness that might not be obvious to the naked eye. Future studies could demonstrate the validity of this theory for the implementation of advertising strategies within advergames by conducting research through design processes. Furthermore, this theoretical model should be applied during the design process of a persuasive game in order to conclusively demonstrate its validity.

Finally, since the theory that I have proposed is used to describe how persuasive communication works within digital games, further research could apply this theory to the study of persuasive communication within other types of persuasive games. For that purpose it would be necessary

to identify the specific factors that determine the conceptualization of persuasive structures for each type of persuasive game.

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Biography

Teresa de la Hera is postdoctoral researcher and lecturer at Utrecht University where she is member of the Center for the Study of Digital Games and Play. She started her academic career at the University of Santiago de Compostela in Spain in 2006 where she conducted research in the fields of new media and persuasive games. She was the first scholar at the USC to conduct research in the field of Game Studies and one of the first Spanish academics to study the field of Persuasive Games. In 2010 she was a visiting PhD Candidate at the University of Amsterdam, where she spent four months under the supervision of Professor Jan Simons. Later on, in 2011, she moved to the Netherlands where she obtained an International PhD Fellowship to finish her PhD at Utrecht University. She has also taught courses and offered guest lectures on new media, persuasive games and serious games.

Appendix 1

Year	Advergame	Brand	Product
2003	Curiously Strong All Night Long	Altoids	Candy
2003	Duncan Man	Duncan	Toy
2004	The Quest of the Rest	The Polyphonic Spree	Music Band
2005	Grrr Game	Honda	Car
2006	Altoids Factory	Altoids	Candy
2007	Fight for Kisses	Wilkinson	Razor
2007	Get the Glass!	California Milk Processor Board	Milk
2007	The Daisy Field	Daisy	Perfume
2008	Challenge L'Equipe Junior	L'Equipe Junior	Sports Newspaper
2008	Swedish Armed Forces Recruit #1	Swedish Armed Forces	Army
2008	Hotel 626	Doritos	Snacks
2008	Red Bull Flugtag Flight Lab	Red Bull	Drink
2008	The Mentos Kiss Fight	Mentos	Candy
2008	Finnair-Early Jack	Finnair	Airline
2008	Got milk?	Milk Commission Board	Milk
2008	Julian Velard	Julian Verald	Music Band
2009	Doritos iD3	Doritos	Snacks
2009	Ace of Mace	Wiberg	Spices
2009	Swedish Armed Forces Recruit #3	Swedish Armed Forces	Army
2009	Swedish Armed Forces Recruit #2	Swedish Armed Forces	Army
2009	Capri-Sun Disrespectoids	Capri-Sun	Juice Drink
2009	Hit it Pure	Callaway	Golf Equipment

2009	Golf GTI Tracks	Volkswagen	Car
2009	Red Bull Soapbox Racer	Red Bull	Energy Drink
2010	Battle of Cheetos	Cheetos	Snacks
2010	Scorpio	Scorpio	Perfume
2010	Climb Mount Asgard	Berghaus	Sportswear
2010	Swedish Armed Forces Recruit #5	Swedish Armed Forces	Army
2010	Black Sunshine	Black Sunshine	Coffee
2010	mBall	m&m's	Candy
2010	Mr Strings' World Tour	Cheestrings	Snacks
2010	The Impossible Hoop Challenge	Cadburys	Chocolate
2010	Friend-o-meter	Orange	Telecommunications
2010	Chrome Fastball	Chrome	Browser
2010	Sunset to Sunset	Spleen United	Music Band
2010	Hail the Villain	Hail the Villain	Music Band
2010	Blackthinking	OCB	Rolling Paper
2010	Eat a Chiquita	Chiquita	Fruit
2010	Nightmare Never Sleeps	Nike	Sneakers
2010	Tignes Winter Madness	Tignes	Resort
2010	2099	Liberty Mutual	Auto Insurance
2010	Equestrian Neightion Riding Academy	Equestrian Neightion	Horse Equipment
2010	Honeyway Train Honeyway Train	Cheerios	Cereals
2010	Adidas Original Neighborhood	Adidas	Sneakers
2010	Nespreso Variations	Nespresso	Coffee
2010	Volvo FMX	Volvo	Truck
2010	Costumize.me	Customize.me	Costumes
2010	D'Arc Mini Challenge	Mini	Car
2010	Free your dance	Jabra	Headphones
2012	Xperia Face Off	Sony	Mobile Phone
2012	Old Spice: 4 1/2 Weeks to Save the World	Old Spice	Deodorant
2012	10 Ways to try and destroy a Candy	Candy	Washing Machine
2012	The Naughty ChristmasJP	JP Gaultier	Fashion

2012	Get Winter Ready	Dick's Sporting Goods	Sportswear
2012	Red Bull Formula Face	Red Bull	Energy Drink
2012	Samsung Smart Park	Samsung	Electronics
2012	Run Puma Run	Puma	Sportswear
2013	Packing Battle	Travel Insurance	Travel Insurance

Appendix 2

Year	Advergame	Brand	Product	Person Interviwed
2010	mBall	m&m's	Candy	Patricio Berrios. Creative Lead at Media Monks
2010	Tem de Tank	Volkswagen	Car	Jaïn van Nigtevegt. Creative Director at Flavour
2010	Adidas Original Neighborhood	Adidas	Sneakers	Diederik Groesbeek. Owner at Xform Games
2011	Boti Boti Colacao	Colacao	Drink	David Ferriz. Director at Devilish Games
2012	Nutricia Soeperheld	Nutricia	Soup	Bas van Haren. Sales manager at Mad Multimedia
2012	El Yate de PinyPon	PinyPon	Toys	David Ferriz. Director at Devilish Games
2012	Red Bull Formula Face	Red Bull	Energy Drink	Diederik Groesbeek. Owner at Xform Games

Samenvatting

De ontwikkeling van nieuwe technologieën en de verspreiding van breedband internet en mobiele apparaten hebben de groei van de game-industrie en de popularisering van digitale games vergemakkelijkt. Met deze factoren in het achterhoofd begonnen marketeers, zich bewust van de mogelijkheden van diversificatie en uitbreiding van de gamende bevolking, een tendens waarbij reclames werden veranderd in een andere vorm van entertainment die uiteindelijk meer investeringen in advergames tot gevolg had. Tegenwoordig kunnen advergames worden gevonden in merkspecifieke microsites, gameportals, social media en digitale app stores. Ze worden gespeeld op mobiele telefoons, desktop computers, laptops en tablets, en de meest succesvolle zijn viraal wereldwijd verspreid.

Er is echter een gebrek aan kennis onder marketeers en marketingbedrijven over de mogelijkheden van digitale games als medium om reclameboodschappen over te brengen. Hoewel digitale games reeds meer dan drie decennia worden gebruikt als een medium om reclameboodschappen over te brengen, heeft het gebrek aan kennis over dit onderwerp ertoe geleid dat ontwerpers van advergames creatieve strategieën van andere media lenen. Als gevolg van de interactieve aard van digitale games werkt dit niet altijd. Daarnaast worden veel advergames ontworpen door marketingbedrijven die zich meer richten op het overbrengen van een reclameboodschap dan op het maken van games die spelers motiveren om ze te spelen en te blijven

spelen. Hieruit volgt dat een beter begrip van hoe digitale games kunnen worden gebruikt om reclameboodschappen over te brengen niet alleen een belangrijke bijdrage zou leveren aan de academische studie van dit onderwerp, maar ook aan de industrie van advergames.

Het doel van dit proefschrift is om een antwoord te formuleren op de vraag hoe digitale games kunnen worden ontworpen om reclameberichten over te brengen die zinvol zijn vanuit zowel het perspectief van het merk als de optiek van de speler. In dit onderzoek gebruik ik een interdisciplinair theoretisch kader om de studie van advergames te benaderen. Dit kader bestaat uit theorieën uit gamestudies, mediastudies en studies over overtuigingskracht ondernomen vanuit een geesteswetenschappelijk perspectief. Deze interdisciplinaire aanpak helpt te begrijpen hoe overtuigingskracht binnen digitale games kan worden uitgeoefend door het smeden van nieuwe interdisciplinaire verbindingen binnen het gebied van gamestudies, terwijl ook de toegang tot nieuwe onderwerpen die belangrijk zijn voor dit gebied wordt verbreed. Verder kijk ik naar eigentijdse ontwerptheorieën en hun relatie tot games en hoe deze relatie in een praktische context kan worden gebruikt.

In dit proefschrift maak ik gebruik van een interdisciplinair kader om een theoretisch model te schetsen met het doel de bestaande kennis te structureren die kan helpen uit te leggen hoe persuasieve communicatie werkt binnen digitale games. Een theoretisch model is gebouwd om "de fenomenen die men wil begrijpen te verklaren"[66] (Williams , 2003 , p . 17) en kan worden beschouwd als een empirische theorie. "Het doel van een theorie is de onzichtbare structuur zichtbaar te maken die de begrijpelijkheid ordent en over kan brengen"[67] (Elsaesser & Buckland , 2002 , p . 5) op de verschijnselen die men probeert te verklaren. Met dit theoretische model streef ik naar een nieuw theoretisch perspectief dat inzichtelijk maakt hoe overtuigingskracht kan worden gestructureerd binnen digitale games. Het theoretisch model zal dienen om bepaalde aspecten van de persuasieve structuur van advergames te identificeren en te analyseren vanuit een nieuw en specifiek perspectief. Hieruit volgt dat mijn onderzoek vooral theoretisch is, maar hoewel

[66] Vertaald door de auteur uit het Engels.

[67] vertaald door de auteur uit het Engels.

deze studie niet per se empirisch is is het doel bij te dragen aan het theoretisch kader voor empirisch onderzoek op dit gebied. Als onderdeel van dit proefschrift beschrijf ik een case study die het nut van deze studie voor empirisch onderzoek aantoont.

Om de interne overtuigende structuur van persuasieve games te kunnen beschrijven richt ik eerst mijn aandacht op hoe andere wetenschappers hebben uitgelegd hoe digitale games betekenis overbrengen (Bogost, 2007; Raessens, 2009; Salen & Zimmerman, 2004; Sicart, 2011). Door een kritische analyse van deze literatuur identificeer ik welke verschillende dimensies betrokken zijn bij de productie van betekenis binnen digitale games. In dit proefschrift onderschrijf ik het idee dat, bij het spelen van een bepaald digitaal spel in een gegeven context, spelers uiteindelijk de betekenis van een toneelstukervaring genereren. Maar om te begrijpen hoe digitale games kunnen worden gebruikt met het doel spelers te overtuigen -wat het geval is met advergames-, is het eerst nodig om te onderzoeken hoe ze kunnen worden ontworpen om betekenis over te brengen. De context van het spel kan de bedoelde betekenis in digitale spellen transformeren en nieuwe betekenissen genereren, waardoor de context een belangrijke rol speelt in de overtuigingskracht van een spel. Toch geeft het ontwerp van een spel een bepaalde richting aan de wijze van spelen. Wegens tijdgebrek beperk ik mij tot het bestuderen hoe digitale games kunnen worden ontworpen om betekenis over te brengen. Dit proefschrift presenteert dus een eerste model van hoe games kunnen worden ontworpen om overtuigende boodschappen over te brengen.

Om te begrijpen hoe de affordances van het spel specifiek gedrag van spelers uitnodigen vertrouw ik op bevindingen van spelgeleerden Salen en Zimmerman (2004). Salen en Zimmerman verwijzen naar semiotische principes om uit te leggen dat spelers zelf betekenis maken wanneer ze een reeks van tekens in een systeem interpreteren om onderlinge relaties vast te stellen. Daarnaast leggen ze uit dat de context waarin deze tekens worden geïnterpreteerd de betekenis die spelers eraan geven kan beïnvloeden (Salen en Zimmerman, 2004, p. 364). Volgens deze redenering maak ik de aanname dat overtuigingskracht binnen digitale games kan worden uitgeoefend door gebruik te maken van drie overtuigende niveaus die gerelateerd zijn aan de tekens die in het spel zijn ingebed, het systeem waarmee spelers met de tekens van het spel interageren, en de context waarin games worden gespeeld. Ik

stel dat het mogelijk is binnen deze drie niveaus van overreding meerdere overtuigende dimensies te situeren met betrekking tot alle hierboven besproken vragen.

Hoewel het in dit proefschrift voorgestelde theoretisch model duidelijk zal maken hoe persuasieve communicatie in digitale games kan worden geïmplementeerd en daarom nuttig zal zijn voor de studie en het ontwerp van persuasieve games, is het hierbij ook belangrijk om te benadrukken dat elk type overtuigend spel een reeks kenmerken heeft waarmee rekening moet worden gehouden bij de analyse of het ontwerp van zijn overtuigende structuur. Daarom stel ik dat advergames speciale kenmerken hebben die hen onderscheiden van andere soorten overtuigende spellen en dat ze apart moeten worden onderzocht.

De doelstellingen van advergames en de houding van de spelers ten opzichte van reclameboodschappen onderscheiden bijvoorbeeld advergames van educatieve spellen. Terwijl een positieve houding kan worden verwacht van de spelers naar de leerdoelen van educatieve spellen, is het belangrijk te onderstrepen dat reclame-uitingen meestal een ongewenste vorm van communicatie zijn (zie Messaris, 1997, p. 5). Daarom is het denkbaar dat advergame-spelers niet verwachten dat ze worden overtuigd tijdens een spelsessie. Hieruit volgt dat advergames de weerstand van spelers tegen de overtuigende boodschap moeten overwinnen voor ze effect kunnen hebben (zie Klimmt, 2009). In deze studie identificeer ik daarom de factoren die in overweging moeten worden genomen om overtuigende strategieën voor advergames te kunnen analyseren of ontwerpen.

Kortom, in dit proefschrift stel ik met behulp van een interdisciplinair theoretisch kader nieuwe definities voor van de begrippen overtuigende games en advergames. Verder presenteer ik een theoretisch model voor de studie van persuasieve communicatie in digitale games. Bovendien identificeer ik de factoren die in overweging moeten worden genomen bij het analyseren of het ontwerpen van persuasieve strategieën voor advergames.