Video Games Around the World (Portugal)

Chapter · April 2015

DOI: 10.7551/mitpress/9780262527163.003.0028

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PORTUGAL

Nelson Zagalo

It took ten years after *PONG* (1972) and the arrival of Sinclair microcomputers (Adamson and Kannedy 1986) for Portuguese game development history to begin. The first video game we have been able to trace was José Oliveira's *Laser* (1982), created on a Sinclair ZX-81. During the last decades, the Portuguese video game community has been able to create and implement for almost any game platform, creating around 350 video games; however, the main platform has always been personal computers, rather than proprietary consoles, and the latter figure very little into the country's video game history.

Portuguese video game history is mainly characterized by the production of various highly interesting games and game technologies, but ones without international consequence. This means that from 1982 to 2012, we can find highlights in every five-year period; however, these hardly relate to each other, thus failing to grow and empower a Portuguese industry in the domain of game development. This is not unlike the situation faced by the other arts in Portugal, namely the film industry. Therefore, we'll spend this chapter listing and explaining the importance of each of these highlights in the history. We believe that looking back, putting together our story, and sharing it will contribute to the avoidance of repeating errors from the past, and so contribute to a stronger Portuguese game industry.

The First Games

In the 1980s, a revolution arrived from England with Sinclair microcomputers, the ZX-81, and ZX Spectrum. José Oliveira, a college computer science student, received his first ZX-81 during Christmas of 1982. Since he had already played with programmable calculators, he started programming the ZX-81 right away and developed more than fifty little programs in a couple of days. After having implemented a program for drawing mathematical functions (such as $y = f(x)$), Oliveira went further and decided to add a goal to the graphics being drawn on the screen. The addition of a goal, and points for each successful goal, inspired the ideas for his first two games, *Laser* (1982) and *Bala* (1982).

The two games had very similar mechanics, which involved changing the angle of a line drawn on the screen. In *Laser*, the line would be drawn linearly, imitating a laser beam, while in *Bala* the line included a variable for gravity that would add the curvature typical of a cannonball trajectory. In both games, the goal was for the player to set the angle at which the computer would draw the line and attempt to reach the blinking pixel. The game featured a points system so that every time it hit the pixel, the player not only received a congratulatory message, but also a point was added to the player's score. We can define these games as basic shooters, and in the case of *Bala* (taking into account its particular use of physics), we have, to some extent, the basic mechanics used in a game like *Angry Birds* (2009). Oliveira never thought about selling his games, but he managed to distribute them at the town coffeehouse, which made him quite popular and suggested that games could become commercial products.

The First Commercial Games

In 1983, the ZX Spectrum arrived in Portugal and game fever began, not only for playing, but also for creating new titles. These were promising times for microcomputing, not only in Portugal but also abroad (Metzstein 2009). Most of the titles were limited to sharing among friends, but some people started to think that maybe they could do something more with their creations. Thus, two friends, Marco Carrasco and Rui Tito, from Portimão in the Algarve, after having created their first game in BASIC, *Galaxy Patrol* (1983), signed a contract with the British company Wizard Software for distribution in the UK of three new games written in Assembly language: *Mr. Gulp*, *Defenders*, and *Moon Megatron* (all 1984). The games were not a success, but their creators referred to the importance of the surrounding culture for maintaining the motivation that kept them creating games. According to Marco Carrasco,

> For us, the appearance of Portuguese magazines was very important (*Cérebro* and later the magazine bi-monthly *Mini-Micro*). They were a stimulus to programming games for publication. In 1985, *Mini-Micro* launched a game programming competition to encourage the creation of programs; we competed and won a dot matrix printer for the ZX Spectrum, a luxury at the time. Thereafter, the editor of *Mini-Micro* invited us to start writing regularly for the magazine and challenged us to develop a book on machine code programming. The invitation resulted in a book dedicated to the programming of games, *Super Programas em BASIC e Código Maquina* (1986).[1]

Super Programas em BASIC e Código Maquina (*Super Programs in BASIC and Machine Code*) (1986) would be the first Portuguese book completely dedicated to game development. As a result of their rising interest and achievements, Mario Carrasco and Rui Tito tried a second venture in the UK, this time working with Gremlin Graphics. They developed their biggest commercial success, *Alien Evolution* (1987) (see fig. 1), which returned more than £20 thousand. Gremlin's producer invited both friends to Sheffield, UK, to get to know them personally and show them the studios. As Marco told us, they couldn't believe that two eighteen-year-old guys could have done all the work required to load the machine assembler code with a tape recorder.

Figure 1
Paradise Café (1985) (top, left); *Alien Evolution* (1987) (top, right); *Portugal 1111* (2004) (bottom, left); and *Under Siege* (2011) (bottom, right).

The First National Hit

The year 1985 represented one of the higher moments for pop culture in Portugal in music, films, clothes, and also games, which included one of the biggest successes of the Portuguese game industry, *Paradise Café* (1985) (see fig. 1). It would be hard to find a person who had a ZX Spectrum in Portugal in the 1980s and did not know the game, but even those who did not will certainly have heard of it. However, despite several unsuccessful attempts by magazines and Web sites over the last decades to identify the game's author, we only know his nickname, Damatta. Analyzing the content of the game, we can easily understand why the author wants to remain unknown.

Paradise Café became famous not only for its adult themes, despite the poor quality of its gameplay, but because one of the elements that contributed most to its success was the fact that it was based on the so-called "Reinaldo story," which was a big topic of conversation in coffeehouses throughout the country. People were talking about a famous football player named Reinaldo, who had allegedly sent a pop singer to the hospital after they had intercourse. The singer belonged to the first Portuguese pop girl-band, Doce, a big success in

those years. The story was never confirmed, no hospital records were ever found, and it is now classified as an urban myth. But these elements were appropriated by the game, creating a very direct relationship with the myth and triggering an intense spread via word-of-mouth, leading to big success for a very basic game.

Game Technology Made in Portugal

Timex, the American watch manufacturer, which was established in the nineteenth century, came to Portugal in the 1970s and settled in Costa da Caparica, where it still resides today. Its history is relevant in the world of video games because in 1980 its CEO, Fred Olsen, made a great transformation in all its manufacturing processes, closing factories and introducing new technologies into the remaining ones. More importantly, he met Clive Sinclair in 1981 and signed an agreement with him; afterward, Timex Corporation would manufacture and distribute Sinclair computers. In Europe, the product would be called the Sinclair and would be manufactured at Timex Scotland. For the US market, Latin America, and Eastern Europe, the product would be called the Timex Sinclair and would be manufactured in Portugal. Although the factory in Portugal was initially only an assembly line, the hiring of Alvaro Oliveira, an electrical engineering PhD, gave the factory an important role in terms of research and development (Beira 2004; Beira and Heitor 2004).

Timex Portugal began manufacturing the Timex Sinclair TS1000, which was the ZX-81, to sell in the United States, but it completely failed in the US market. Commodore seized the market through a highly aggressive pricing policy, offering discount coupons to those with used consoles or machines. Soon the TS1000 was out of the American market, and in Portugal, design work began on the new Timex Sinclair for the American market, the TS1500, which would be an intermediate version between the ZX-81 and ZX Spectrum, with 16KB RAM. However, the effort was not rewarded as it arrived late, when the ZX Spectrum was also coming to market.

Although the American market was not buying the expected numbers, production at the Portuguese factory was still quite significant, quickly reaching a thousand employees and the production of ten thousand machines per day. The factory was not just a simple assembly line, but included research and development in areas such as electronic integrated circuits, the molds for plastic boxes, the membranes for keyboards, and even innovative metallic inks as insulators. With the arrival of the ZX Spectrum, Timex Portugal created the TC 2048, which turned out to be a machine sold mostly in Portugal and Poland. In Portugal it had strong penetration, and most people bought it without even knowing it was made in Portugal.

Apart from microcomputers, the Portuguese plant, together with INESC (Instituto de Engenharia de Sistemas e Computadores), developed an add-on for the TC 2048, the 3000 FDD (itself almost a complete computer), which was connected to the TC 2048 to expand processing (via a Z80 at 4MHz) and memory (with 64KB RAM and three-inch floppy drives). It even had an operating system based on the CP/M by INESC. According to Professor António Dias Figueiredo, "The role of Timex Portugal in awakening the country's interest in computers was particularly important, as the company put a very high number of personal computers, Spectrum and

Timex, in the Portuguese market at a very low price, which in mid-1985 reached an internal volume exceeding 150,000 units, one of the highest penetration rates in Europe of computers per household" (Figueiredo 2004).

After the entire venture and achievement of success, the home computer market shifted to the IBM PC, and Timex Corporation (as well as Timex Portugal) left the computer market and returned to the world of watches. It is interesting to note that despite the fact that Timex was not a Portuguese brand, its impact on the country's electronics industry was tremendous, creating new companies and perfecting others. In this sense, the history of Timex is one of the greatest national success stories of the video game industry. Despite not having directly contributed to the creation of new games, it contributed greatly to the creation of a national culture of adherence to a whole new technological world, and with it, the acceptance of a new art form, the video game.

The Age of the CD-ROM

By the middle of the 1990s, domestically produced games were using the IBM PC platform but leaving behind diskettes and adopting the CD-ROM. This was not merely the result of technological change but a necessity, since the games were using bitmap images, raster graphics, and CD-quality music instead of polyphonic sound. In the case of the moving image, the CD-ROM permitted the appearance of the first full-motion video scenes, although in the early years programmers had to use very high compression, reducing quality, including the reduction of the number of frames per second. Portuguese game development in the time of the CD-ROM was divided into three main types: discoveries, education, and entertainment. Of the three, education is the least interesting for our account here because it mainly involved the copying of game mechanics from previous games or just imitations of imported games. Thus, we'll only present here the most interesting games of the "discoveries" and "entertainment" types.

During the 1990s, Portugal commemorated the 500-year anniversary of the discoveries of the Admiral Vasco da Gama and others, which would translate into a lot of available funding for the creation of artwork related to the theme. Also in 1998, the Lisbon World Exposition (Expo '98) was held, which would also fund projects related to the oceans and national endeavors. New companies emerged in those years, as a Grupo Forum that began activities in the area of multimedia production. However, we must note that of the over twenty CD-ROMs that Grupo Forum developed, only two had the characteristics of a video game and were not merely databases of digital illustrations, videos, and text. This is evident in the words of Marco Morais, coordinator of the group's first video game, *Aventuras da Peregrinação* (*Adventures of Pilgrimage)* (1997): "Since I started programming, I always had the ambition to make a game set in Portugal, but it was not an easy task to convince people to support the idea of making a game at the Group; one of the ways that I did this was to give the game educational attributes" (Zagalo 2013, 82).

Aventuras da Peregrinação was dedicated to the Portuguese explorer Fernão Mendes Pinto and presented a dramatization of his pilgrimage. It was divided into six narrative frames or levels in which the player had to

solve some of the problems the explorer faced on his trip. In the process, the video game put players in the place of the explorer, creating a strong sense of identification and thus facilitating learning.

Then, in 1998, the Grupo Forum dedicated its second video game to Vasco da Gama, with *Vasco da Gama: A Grande Viagem* (*Vasco da Gama: The Great Journey*) (1998). *Vasco da Gama* was a great project in terms of multimedia experience. The video game came on a CD-ROM, but beyond this, it had a logbook (with activities stimulating the player's interaction with the events of the game) that could be used in classrooms. The game also came with a second CD, an audio CD with the game's entire soundtrack. The experiment was then complemented by a website with specific information for teachers and parents. In the online component, one could download more games, including those corresponding to the return voyage of Vasco da Gama.

The game, created by Alice Alcobia and Luís Paulo Pinho, presented a collectivist perspective of the trip, diminishing the leading role of Vasco da Gama and giving it to the storyteller. The idea was to avoid the creation of the hero figure and make the player understand that piloting a boat on the high seas was impossible to do alone.

Despite these interesting efforts, it was never easy to convince investors in Portugal to support games that only had entertainment as the goal. Thus, the only two commercial games made for the CD-ROM format between 1995 and 2004 were *Gambys* (1995) and *Portugal 1111* (2004). In 1993, one of the members of the team who had created the first commercial games for ZX Spectrum, Rui Tito, came back to start a new foray into the world of video games. This time he decided to join illustrator and animator Luis Peres, programmer Carlos Leote, and game designer Nelson Russa, plus Jorge Monica and Rui Rosa, under the name Portidata. The idea was to create a graphically advanced video game, far beyond the limitations of the Spectrum games of the 1980s.

In *Gambys*, gameplay was designed with a hundred levels that led through dozens of puzzles, guaranteeing a sense of progression through the increasingly difficult levels, ensuring more than eight hours of entertainment. The theme of the game revolves around an impending ecological disaster on planet Earth and the salvage effort carried out by the player, who controls one of the oldest species on the planet, the Gambys. The game was a milestone in the history of Portuguese game development on several fronts, being the first game to make use of three-dimensional computer animation, the first national game to be sold in a box, and the first game to be made by a team working professionally full time, developing the game for two years.

Gambys was very well received in Spain and Portugal, but Portidata wasn't able to distribute the game outside these two countries, despite having CD-ROM versions in Portuguese, Spanish, English, French, and German. There were advanced negotiations between Portidata and Psygnosis for worldwide release, but then the unexpected happened. The game had been made to run on MS-DOS, but in 1995, Windows 95 appeared, and Psygnosis wanted to launch only those games that were compatible with it. With such a small team, Portidata could not possibly create a conversion in time, and so the release was limited to Portugal and Spain. Because of that, after the game's launch, Portidata left game developing and dedicated itself to the development of management software.

The CD-ROM market was very strong in the second half of the 1990s, but the early 2000s saw this format decline very quickly with the emergence of technologies such as Flash, which could create online content that previously could only be created offline. Thus, 2004 was the year of the last commercial game released in Portugal. *Portugal 1111* would be launched on April 22, 2004, and distributed with *Visão*, a national news weekly magazine.

Portugal 1111 (see fig. 1) was a recreation of the Moors's territorial conquest in Portugal, made as a turn-based strategy game. Ciberbit created the game, with investment from the municipality of Soure and with scientific advisement from academic historians at the University of Coimbra. The project was conceived and coordinated with conviction by Professor Joaquim Carvalho and was designed to be a game, not merely educational software, since its inception. In terms of gameplay, *Portugal 1111* is similar to games such as *Age of Empires* (1997) and does not lag behind in anything, showing remarkable quality both in graphics and in artificial intelligence. All these attributes make *Portugal 1111* one of the most important games in Portuguese game development history.

Mobile Innovation

In 1999, António Câmara returned from the United States, where he spent a year as a professor at the Massachusetts Institute of Technology (MIT), and decided to create a company that turned academic research ideas into innovative products. He joined Eduardo Dias, Edmundo Nobre, Miguel Medicine, and Nuno Correia, who had worked together at the Faculty of Science and Technology at the New University of Lisbon. YDreams was founded in June 2000. Their goal was to move forward in the field of new communication technologies, a heavily hybrid area, and so they built the company with people from very different backgrounds, from engineering to the arts.

In 2002, this group, working together, delivered a demonstration of a mobile game made in Java. The demo triggered a green light for Eurico Moita, Ricardo Andrade, and Tiago Carita, who developed the first YDreams mobile game, *RockStar* (2002), which was released by Vodafone in November of that year and would become the most-played game of Vodafone Live.

Game development teams at YDreams were small, and projects did not last more than two to four weeks. Development was carried out on a proprietary YDreams platform initially developed by Eurico Moita and then improved over various games. Games were running in a 2-D environment, yet Tiago Carita developed some scenarios and 3-D animations which were then converted into 2-D sprites.

In 2003, Blast Theory, in conjunction with the Mixed Reality Lab at the University of Nottingham, presented the experimental game *Can You See Me Now?* (2003) at Ars Electronica (Benford et al. 2006). This was a new type of game involving "urban hunting" using GPS systems integrated into PDAs. *Can You See Me Now?* triggered enormous interest in location-based content development, which would bring together the scientific and artistic communities, and to which YDreams was not indifferent.

In that same year, YDreams entered the history of international video game development by creating the first commercial location-based game for mobile platforms, *Undercover* (2003), a game with limited multiplayer ability. The game's story goes something like this: after Russian documents with data on biological weapons are stolen by a group of terrorists, the player assumes the role of an agent of the TIA (Terrorism Intelligence Agency) with a mission to save the world from imminent war. To do this, players need to use their location in order to act, to take shelter in predefined locations, to prevent terrorist attacks, and to use the power of "teleportation" to travel between places on the map.

With in-house know-how, YDreams created the sequel *Undercover 2: Merc Wars* (2003). The bar was raised and the whole system was made more complex, leading YDreams to create what is probably the first commercial MMO mobile location-based video game. Tiago Carita, one of the game designers, described the complexity and challenges behind the game:

> *Undercover 2* was undoubtedly a pioneering milestone in my entire career, the game had complicated technology, it had to be a LBG (Location Based Game) and have actual maps as backgrounds. We created an RPG (Role-Playing Game) with various characters, we had a multitude of weapons and equipment, we could equip the character and that could change the points of combat and movement. The characters had to move in real time on the screens of Nokia S60s with explosions, power shots, and even flamethrowers. We had a highly-evolved system with multilevel missions in forking structures; depending on the choices, the player's mission adapted. The game was fully managed via GPRS and we had close to 500 players playing simultaneously, at a time when accessing the Internet on a phone was very expensive, slow, and required players to load the actual maps. The game was created as a global game that ran on all carriers and everyone played against each other.[2]

This was one of the highlights of the history of Portuguese video game development; however, and despite the greatness of the feat, many problems were present, which meant that the game failed to inspire a wave of innovation in Portugal. It is true that this lack of interest in innovation was due more to external factors than to YDreams itself. In 2003, mobile technologies were still far from the iPhone or Android. Furthermore, developing a game that ran globally ran contrary to the vested interests of the operators, who saw no value in sponsoring a platform where their customers would share equal content. On top of all this, there was still the problem of the lack of standardization: for each family of devices, games had to be reprogrammed and redesigned, sometimes even within the same family; and so every game could be redone almost ten times to cover a number of handsets that operators considered relevant. At that time, game companies thought it would be easier to move to online platforms and leave mobile behind.

From Downloadable to Online

In the early 2000s, the Internet began to take the place of the CD-ROM format, as the emergence of technologies like Shockwave and Flash made possible the development of graphically dynamic applications and complex environments online. The national educational games on CD-ROM started to move onto the Web,

and portals for kids appeared. Online games and MMOs began to appear, and in the second half of the 2000s, downloadable casual games arrived, completely changing the face of national game production.

In 2003, Portugal gave birth to its first MMO in the area of space adventures, *Orion's Belt* (2003), created by Pedro Santos and Nuno Silva on the Microsoft platform .NET with ASP.NET and C#. The game had its beginnings as a student project, as the result of a joint project for two courses—Information Technology and Software Engineering—at ISEL (Instituto Superior de Engenharia de Lisboa). *Orion's Belt* is based on games such as *Master of Orion* (1993) and presented as an innovation of the battle system board game, depicting a naval battle in space. The game was published as open source on SourceForge.net and was seen by the media as a promising work in the field of national games, having been featured in several television programs on AXN and RTP, as well as in several magazines. In 2006, it won the awards for Best Technology and Best Internet Game at GAMES 2006. But after finishing their degrees, and without having found a way of financing and sustaining the game, the creators were obliged to look for companies willing to support the game. So it was in 2008 that Pedro Santos and Nuno Silva founded PDMFC (*Projectos, Desenvolvimentos, Manuteção, Formação, e Consultoria*), a company capable of promoting *Orion's Belt* according to the creators' wishes, launching *Orion's Belt 2.0* in 2009 and turning a simple student game into a professional production.

The year 2008 was a historic one for Portuguese downloadable games. After several games were developed and launched for international game portals, RTS reached a production agreement with the portal BigFishGames.com. This resulted in *Farmer Jane* (2008), the first Portuguese video game to be featured in an international top ten of downloadable games. Being in fourth place at BigFishGames.com and the fifteen days that it stayed on the list allowed *Farmer Jane* to reach half a million downloads, legitimizing the Portuguese video game development industry and giving it worldwide exposure.

Farmer Jane used a proprietary 3-D game engine developed internally by RTS. Unusual for games of that time, the entire game had three-dimensional graphics that were rendered in real time. The game's design, which was praised in reviews, was largely responsible for the game's success. *Farmer Jane* was an agricultural time management game, a theme that was in vogue at that time in casual games; one year later, Zynga's *FarmVille* (2009) appeared on Facebook and became its most successful game. As for features, *Farmer Jane* allowed players to customize their avatars, something unusual for a casual game, as were the three-dimensional graphics that dazzle the player with game production values well beyond ordinary casual games.

Finally, in 2010, the Portuguese company Biodroid produced the most successful game to date for the iPad, *Billabong Surf Trip*, which was then distributed by Chillingo worldwide in the App Store. The game was designed with a simulator of real beaches, heaving beach-specific types of waves and permitting different kinds of maneuvers. The interface, controls, and game mechanics were designed to take into account feedback from professional surfers and Billabong. The game's designers tried to create a virtual experience of surfing that would mirror real experiences that surfers felt in the water.

Since its launch, *Billabong* has earned more than 1.5 million downloads worldwide, and the game became such a success that Biodroid even created an internal group just for the production of sports games, which was responsible for launching *Cristiano Ronaldo Freestyle* (2011) and *MegaRamp* (2012).

PS3, Under Siege

Since its inception, the Portuguese video game industry has tried to create a console game, but most of the projects created in the 1990s and 2000s remained incomplete and were never published. At last, in 2008, the first console video game fully created in Portugal was published: *Toy Shop* (2008) for the Nintendo DS. It was developed by the Portuguese Seed Studios, produced by Gameinvest, and then distributed by the American company Majesco Entertainment.

Following this first step, other companies have been able to publish their own games. Biodroid's very interesting game, *Miffy's World* (2010), was made from a very important IP. The Miffy license belongs to Mercis BV, which represents a brand that has published more than 120 books and sold more 85 million copies worldwide since its debut in 1955. *Miffy's World* was designed and produced as a simulation game world for children that featured the rabbit Miffy and her cast of animal friends. It was launched in WiiWare in summer of 2010.

After these first games, Portugal was able to produce a successful console game, this time for the PS3, with the game *Under Siege* (2011) (see fig. 1). Completely created and produced by Seed Studios, a company based in Porto, it became one of the ten best-selling indie games in the PS3 network in 2011. *Under Siege* was innovative in the sense that it presented an RTS game to be played on a console and with a game pad. The art of the game was brilliant, in 3-D and 2-D, making it feel more like a professional game sold in a box rather than an indie game for the PS3 online network.

Producing a game with the production values of *Under Siege* was something completely new in Portugal, and it marked a historical achievement in the country's history of game development. The game received funding from the government and business, allowing a production cost higher than most of the feature-length motion pictures in Portugal. The team behind this creation had worked together previously in game engines as well as the production of demos and games in order to gain community respect so as to be able to attempt production of a console game. It took them ten years to see their dream come true. Pride in their achievement made them give everything to the game, and it explains why they produced such a high-value production (which could easily have cost more than 5 million euros but only ended up costing 1.4 million euros). The game launch was accompanied by strong production value trailers and comic books that helped to generate interest in the game and its story.

Portuguese Video Game Research

Portuguese research on video games was born from the interdisciplinary overlap between two sciences: computation and communication. The first Portuguese university degrees in both fields appeared during the 1970s. Then, in the 1980s, the association of the Portuguese Group for Computer Graphics (GPCG) was founded, and in the 1990s, the Association of Communication Sciences (SOPCOM) appeared. Both associations promoted regular annual events in each scientific branch, creating spaces for the discussion of multimedia

in the 1990s and for video games in the early 2000s. Consequently, by the end of the 2000s, people from both associations wanted to create a specific association for video game studies, and thus the Portuguese Society of Videogames Sciences was born in 2009.

Prior to the appearance of this association, research on both sides had been growing. In 2000, the first Portuguese book on video games appeared, grounded in the master thesis of Jorge Martins Rosa at the New University of Lisbon, entitled *No Reino da Ilusão, a Experiência Lúdica das Novas Tecnologias* (*In the Kingdom of Illusion, the Playful Experience of New Technologies*) (2000). Then, in 2003 came the fourth edition of the magazine *Caleidoscópio—Revista de Comunicação e Cultura*, with the first special issue on the *Cultura de Jogos* (*Game Culture*) (2003), organized by Luís Filipe Teixeira and with texts by Espen Aarseth, Luís Filipe Teixeira, Patrícia Gouveia, Jorge Martins Rosa, and others. The next year, 2004, Luís Filipe Teixeira published another book, *Hermes ou a Experiência da Mediação* (*Hermes or the Mediation Experience*) (2004) with a full section dedicated to ludology.

Also in 2004, the Portuguese Group for Computer Graphics launched the national conference on Person-Computer Interaction, which held the first national scientific workshop dedicated solely to video games, the "Games 2004" in Lisbon. Although it was organized by the computation group, the workshop's participants came in equal numbers from the computation and communication sectors. In 2006, the first International Digital Games Conference was held in Portalegre, with plenty of international keynote speakers. This academic conference was part of a bigger event dedicated to video games, GAMES 2006, which declared bankruptcy the following year, resulting in no event in 2007.

In 2008, however, a new academic event was held in Portugal, Digital Games 2008, which was full of transdisciplinary elements, from education to psychology, design to arts, and computer science to narrative. It was a solid event, with good presentations, and papers passing though peer review with a rejection rate of around 50%. It was this event that inspired the creation of the Portuguese Society of Videogames Sciences in 2009. Since then, every year in Portugal, the academic conference *Videojogos* (*Videogames*) has been held, which is organized by the Portuguese Society of Videogames Sciences together with the university, which elected to host the conference that year. This national conference has served as the point of encounter for people interested in video games who come from other academic disciplines. It has also established partnerships with its Brazilian companion conference, SBGames.

Since then, scholarly publication has flourished in Portugal, with the organizers of the *Videojogos* conference publishing the annual proceedings and making them freely available online for anyone to access. In 2009, I published the monograph *Emoções Interactivas, do Cinema para os Videojogos* (*Interactive Emotions: From Film to Videogames*) (2009) with the Portuguese publisher Grácio Editor and CECS/UM. Over the next two years, the Edições Universitárias Lusófonas published two books, *Jogos de Computador e Cinema* (*Computer Games and Film*) (2009) by Filipe Costa Luz, and *Artes e Jogos Digitais, Estética e Design da Experiência Lúdica* (*Digital Arts and Games, Aesthetic and Design of the Ludic Experience*) (2010) by Patrícia Gouveia. More books are sure to appear as more and more master's theses and PhD dissertations are being written in Portugal on the subject of video games.

Conclusion

The history of Portuguese game development began in 1982, and the country has produced more than 350 games since then. Most of them are short games done within independent frameworks and with no industry to support greater developments. Game development in Portugal has always been highly fragmented in time, and in the early years we can find various important historical landmarks, moments that could have changed the development industry but did not. Looking at the history, we can see that many of the more qualified artists and programmers in the field left and went to work in advertising or telecommunications. Others just abandoned Portugal, emigrating to countries where the field was better recognized. From 2009 to 2012, we've been researching in-depth the history of game development in Portugal, and we've found dozens of great stories and strong motivation in its people. Our goal in this study is to publish it as a book and make game development communities aware of our history. We believe that giving names, listing timelines, and presenting the good quality work that has been done will serve to remind people that they are not alone in this venture. More than that, though, we believe that knowing history helps in the avoidance of errors and will help people know each other better, creating possibilities for collaborations. All this said, we strongly believe that knowledge of the past helps to create the future.

Acknowledgments

This chapter is a summary of the results of a three-year project done by the Portuguese Society of Videogames Sciences to trace the first history ever done in our country on national video game development. Complete results were published in the book *Videojogos em Portugal: História, Tecnologia e Arte* (*Videogames in Portugal: History, Technology, and Arts*) (2013).

Notes

1. Marco Carrasco, in an interview with Nelson Zagalo, 2013.
2. Tiago Carita, in an interview with Nelson Zagalo, 2013.

References

Adamson, Ian, and Richard Kennedy. 1986. *Sinclair and the "Sunrise" Technology.* London: Penguin Books.

Beira, Eduardo. 2004. *Protagonistas das Tecnologias de Informação em Portugal.* Braga: Associação Industrial do Minho.

Beira, Eduardo, and Manuel Heitor. 2004. *Memórias das tecnologias e dos sistemas de informação em Portugal*. Braga: Associação Industrial do Minho

Benford, Steve, Andy Crabtree, Martin Flintham, Adam Drozd, Rob Anastasi, Mark Paxton, Nick Tandavanitj, Matt Adams, and Ju Row-Farr. 2006. Can you see me now? *ACM Transactions on Computer-Human Interaction (TOCHI)* 13 (1): 100–133.

Carrasco, P., and R. Tito. 1986. *Super Programas em Basic e Código Maquina*. Lisbon: Edicoes Socedite.

Figueiredo, António Dias. 2004. Engenharia Informática, Informação e Comunicações. In *Momentos de Inovação e Engenharia em Portugal no século XX*, vol. 3, ed. M. Heitor, J. M. Brandão de Brito, and M. F. Rolo, 551–573. Lisbon: Dom Quixote.

Gouveia, Patrícia. 2010. *Arts and Digital Games, Aesthetics and Design of the Ludic Experience (Artes e Jogos Digitais)*. Lisbon: Edições Universitárias Lusófonas.

Luís, Filipe B. Teixeira. 2004. *Hermes ou a experiência da mediação (Comunicação, Cultura e Tecnologias)*. Lisbon: Pedra de Roseta.

Luís, Filipe B. Teixeira (org.). 2003. *Cultura de Jogos, Caleidoscópio*, no. 4. Lisbon: Edições Universitárias Lusófonas.

Luz, Filipe Costa. 2009. *Jogos de computador e cinema*. Lisbon: Edições Universitárias Lusófonas.

Metzstein, Saul. 2009. *Micro Men*. London: BBC Four.

Zagalo, Nelson. 2009. *Emoções Interactivas, do Cinema para os Videojogos (Interactive Emotions: From Film to Videogames)*. Coimbra: Grácio Editor & CECS/UM.

Zagalo, Nelson. 2013. *Videojogos em Portugal: História, Tecnologia e Arte. (Videogames in Portugal: History, Technology and Arts)*. Lisbon: FCA Editora.