MAKING
GREAT GAMES

AN INSIDER'S GUIDE TO DESIGNING AND DEVELOPING THE WORLD'S GREATEST VIDEO GAMES

Michael Thornton Wyman

MAKING GREAT GAMES

An Insider's Guide
to Designing and
Developing the World's
Greatest Video Games

MICHAEL THORNTON WYMAN

ELSEVIER

Focal
Press

MAKING GREAT GAMES

ACKNOWLEDGMENTS

INTRODUCTION

Look around. Increasingly, video games are becoming more and more a part of the fabric of our day-to-day lives. The debate regarding what should be considered the world's first video game continues, but since the medium's inception some time in the middle of the twentieth century, video games have continued to march forward and defy predictions as to their role in our society and our lives. The 'hard-core' gamer population has continued to grow, pouring more and more of their dollars into console titles and Massively Multiplayer Online Role-Playing Games (MMORPGs). Games on Facebook have brought an entirely new, enthusiastic demographic into the fold. Legions of stay-at-home moms have discovered and embraced casual games. Services like Xbox Live have broadened the experience and potential of games and have made real-time head-to-head competition, collaborative play, and large-scale interactions like those found in Microsoft Game Studio's *1 vs. 100* commonplace. In addition to dedicated game consoles, video games are played on mobile phones, iPads, portable game devices, online through services like Facebook and MySpace, and, of course, the personal computer.

People play video games at home, at school, on the train, and, yes, at work. Video games have caused marriages and, inevitably, divorces. Cycling to my office to finalize this introduction, I was nearly taken out by a bus promoting *Red Dead Redemption*, the latest release from Rockstar Games. By any measure — cultural relevance, revenue, per capita measurement of play or awareness of video games — games represent an ever-expanding phenomenon, and there is no sign of this trend slowing down any time soon.

In a nutshell, video games comprise a huge and growing piece of the entertainment industry. They are also relatively new to the table, and the video game industry remains in some respects immature. Floating somewhere in the space between art and commerce, video games are a cultural, economic, political, and even philosophical singularity. Compared to other, better-established entertainment genres, like film, there is relatively little published information about the actual processes of how video games are produced. While more mature analogous industries such as filmmaking have a wealth of research and published materials of this nature, there is currently a shortage of books that examine the process of creating interactive entertainment and address the commonalities and best practices of high-performing teams making video games.

That's where this project steps in. This book explores the process of making video games from soup to nuts. This exploration is endeavored through a series of authentic 'postmortem' case studies – detailed behind-the-scenes tours with the leaders of the teams that have made some of the most popular and critically acclaimed video games of the modern era. I had the opportunity to visit with key creative leaders from the teams that made these games and to ask them to look back at their processes and reflect on what went right and what went wrong. By examining some of the world's most popular and profitable video games in this fashion, this book allows you to peek behind the curtain and get an honest, genuine look into the process of making video games from concept through production.

The second half of the book offers specific tools and advice directly relevant to those striving to make their own great games. Interspersed throughout is a series of interviews with contributors in key roles on development teams shipping some of the world's greatest video games. Through these interviews, a representative of each of the key roles on a typical, large-scale video game development team shares his or her insights and expertise regarding what factors are critical to the practice of making great games.

Drawn from scores of interviews, postmortems, and my own personal experience making games for the past 15+ years, my hope is that this book will serve as a resource for all those interested in video games, whether personally, academically, or professionally. It is my goal that the book offers specific tools and relevant advice to the growing numbers of people working directly on game design or production, or to those aspiring to work in these fields. At the same time, I hope this book offers something of value to anyone who simply loves video games, and has wondered how the world's greatest video games get made.

How to Use This Book

Feel free to turn to your favorite game. This book is not meant to be read cover to cover. Each of the case studies is fascinating and offers unique insights as well as a particular window into the process of creating great games. Read them in whatever order you please. The analysis chapters tie together common themes from the case studies, and suggest how these best practices can be applied to video game projects moving forward. The team role interviews speak to the ins and outs of the varying jobs that different people do in order to make games.

If you are new to video game development, you might want to begin by glancing through Chapter 14, "Applying These Learnings

to Your Game Projects", for an overview of the team roles and phases of video game development. Again, I encourage you to jump around based on what you find interesting and useful.

Visit the companion website (http://makinggreatgames.com) for more up-to-date information as well as to share your thoughts and communicate with other readers in our forums.

Above all, this book is about making games, so please — have fun!

Why These Games Were Picked

Pop into GameStop and take a gander. Browse BigFishGames.com, where a new casual game is released every single day. The array of currently available video game titles is mind boggling. Driving sims, shooters, arcade classics, kids' games, sports sims, RPGs, fitness games, rhythm games. Games made in Japan, North America, Europe, Australia. The lists go on and on. There are literally thousands of new games out there, with dozens released each week. This is completely subjective and unscientific, but it feels to me that, on average, there is something on the order of one 'great' game released at least every couple of months. So how to pick a handful for deeper exploration? With the games presented here as case studies, I am hoping to represent with a tiny fraction of examples some larger truths about the whole.

This is certainly not meant to be a comprehensive volume, and I'll bet there is a pretty good chance that your favorite game is not included in this book. I set out to incorporate a small group of games that represent variety, based on size (both of game and development studio), type, and platform, whether it's a sequel or something brand new, whether it comprises licensed intellectual property or something started from scratch. I feel exceedingly fortunate to have been able to include some of my personal favorite games, as well as some of the biggest franchises in video game history. Are there other games I would have loved to include? Believe it!

What to Expect

Part 1 of this book comprises the case studies — postmortems recounted by key contributors to some of the world's greatest video games of our era. Each chapter is focused on a specific game, and is made up of an extended interview with a key leader of the team that created the game, as well as screen shots and (often) concept art from the game, and data points related to launch platform, team size, development timeline, awards garnered, and the like.

Part 2 of the book teases out the shared themes and principles that emerge from looking at the successful game projects presented in the case studies in Part 1. In Part 2, thorough and detailed analysis of common, proven best practices as well as missteps give you specific 'nuts and bolts' tools to implement at any phase of your game project, from concept development to prototyping, production, testing, and launch. This analysis section provides real-world, hands-on advice that you can start using immediately to make your own games better.

A series of interviews with industry leaders across the spectrum of roles on a modern game development team rounds out the volume. In these candid interviews, interspersed throughout the book, experts who have worked on several of the world's most acclaimed game franchises share their insiders' knowledge, advice, and opinions about the magic of making great video games.

This book was a blast to research and write. I hope you find it interesting and illustrative, regardless of where you are in your relationship to games, whether you're a rabid or casual fan, someone hoping to get started in the industry, or a veteran with dozens of shipped AAA titles under your belt. At the end of the day, I hope you enjoy reading the book as well as get something out of it.

I look forward to playing your next great game – do keep in touch!

Michael Thornton Wyman
michael@makinggreatgames.com

PERMISSIONS

LittleBigPlanet™ images reproduced by permission of Media Molecule and Sony Computer Entertainment Europe.

World of Warcraft® and *Wrath of the Lich King*™ are trademarks and/or registered trademarks of Blizzard Entertainment, Inc., and *World of Warcraft*®: *Wrath of the Lich King*™ is a copyrighted product of Blizzard Entertainment, Inc., and hereby used with permission.

Diner Dash™ images reproduced by permisson of PlayFirst, Inc.

Uncharted 2: Among Thieves™ images reproduced by permission of Naughty Dog.

Rock Band™ images reproduced by permission of MTV Games.

The *Rock Band* chapter includes excerpts from the "Rock Band Postmortem" originally printed in the May, 2008 issue of *Game Developer* magazine. Reproduced with permission of UBM Techweb.

FarmVille™ images reproduced by permisson of a Zynga Game Network Inc.

Half Life 2™ images reproduced by permission of Valve Corporation.

Bejeweled Twist™ images reproduced by permission of PopCap Games.

Images from *Madden NFL 10* used with permission. © 2010 Electronic Arts Inc. EA, EA SPORTS and the EA SPORTS logo are trademarks of Electronic Arts Inc. The mark "John Madden" and the name, likeness and other attributes of John Madden reproduced on this product are trademarks or other intellectual property of Red Bear, Inc. or John Madden, are subject to license to Electronic Arts Inc., and may not be otherwise used in whole or in part without the prior written consent of Red Bear or John Madden. © 2009 NFL Properties LLC. Team names/logos are trademarks of the teams indicated. All other NFL-related trademarks are trademarks of the National Football League. Officially Licensed Product of NFL PLAYERS. Visit www.NFLPLAYERS.com.

World of Goo™ images reproduced by permisson of 2D Boy.

CONTENTS

Part 2 ANALYSIS

THE GAMES

LITTLEBIGPLANET

A PlayStation 3 exclusive title, *LittleBigPlanet* was the first game created by Media Molecule, a development studio started in 2006 in Guildford, England. *LBP*, as *LittleBigPlanet* is commonly abbreviated, was published by Sony Computer Entertainment Europe, with a North American release on October 27, 2008. From the game's first public presentation by Sony executive Phil Harrison at the Game Developers Conference in the spring of 2007, *LBP* has garnered almost religious fervor among fans for its genre-bending style and gameplay. *LittleBigPlanet* offers a distinctive, fresh, and decidedly unconventional approach to what a console game can be.

At its core *LittleBigPlanet* is a classic side-scrolling platform game, but it is original in almost every conceivable fashion — from the game's main character (Sackboy, Sackgirl, or Sackperson) to the game's physics, presentation style, audio, and perhaps most importantly, the extensive incorporation of user-generated content (UGC) into the player experience. A major component of the game, and no small measure of the game's widespread and passionate appeal, user-generated content plays a starring role that in the *LBP* experience. The revolutionary 'Popit' functionality within *LBP* that enables players to quickly and easily customize their character as well as their own levels has resulted in over 2 million user-generated levels being published as of this writing. The game's tagline: "Play. Create. Share." perfectly sums up what legions of the game's fans are doing within *LBP* each and every day.

I spoke with Siobhan Reddy, Media Molecule's Studio Director and Executive Producer of *LBP*, about the challenges of building a studio and a game at the same time. "Guildford is a small pocket of games development in England," she began, "and I had been working at Criterion there for seven years when the Media Molecule founders — most of whom had been working together at Lionhead Studios, also in Guildford — asked me to come aboard as Executive Producer. I set myself a challenge to develop a different kind of studio — one that had a great culture that was very complementary to creative people, but that was also commercially and creatively
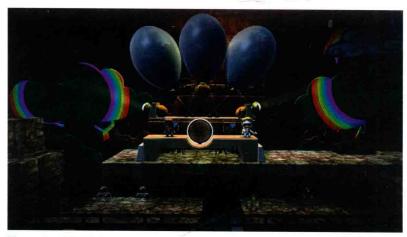
Figure 1. *LittleBigPlanet* represents a distinctive, unconvential approach to what a console game can be.

successful. Basically we all hoped to develop the kind of place where we could create something that we ourselves all loved."

Data Points

Developer: Media Molecule
Publisher: Sony Computer Entertainment Europe
Release date: October 27, 2008
Release platform(s): PlayStation 3
Development engine(s) used: None — everything was created from scratch.
Game development timeline: 3½ years; started January 2006
Development team size: 27 (maximum)
Awards, honors, sales thresholds, etc.: *LBP* appeared on multiple 'best of' lists for 2008, and the game has won numerous awards, including many 'Game of the Year' honors; the team is most proud of the 2008 BAFTA award for Artistic Achievement.

What Went Right
Hired the Right People

Finding great people is always a challenge, and starting from scratch with a new studio makes this process especially tricky. Reddy viewed building a great core team as a primary challenge upon joining Media Molecule. She realized that they were setting out on a very unconventional course: rather than utilizing a centralized, single-person team leader for their game, Media Molecule's co-founders — Mark Healey, Dave Smith, Alex Evans, and Kareem Ettouney — were planning to collaboratively direct