



**Situational**  
**Game**  
**Design**

Brian Upton



**CRC Press**  
Taylor & Francis Group

AN A K PETERS BOOK

# Situational Game Design

Brian Upton



**CRC Press**

Taylor & Francis Group

Boca Raton London New York

---

CRC Press is an imprint of the  
Taylor & Francis Group, an **informa** business

AN A K PETERS BOOK

CRC Press  
Taylor & Francis Group  
6000 Broken Sound Parkway NW, Suite 300  
Boca Raton, FL 33487-2742

©2018 by Taylor & Francis Group, LLC

CRC Press is an imprint of Taylor & Francis Group, an Informa business

No claim to original U.S. Government works

Printed on acid-free paper

International Standard Book Number-13: 978-1-138-03181-4 (paperback)

International Standard Book Number-13: 978-1-138-30518-2 (hardback)

This book contains information obtained from authentic and highly regarded sources. Reasonable efforts have been made to publish reliable data and information, but the author and publisher cannot assume responsibility for the validity of all materials or the consequences of their use. The authors and publishers have attempted to trace the copyright holders of all material reproduced in this publication and apologize to copyright holders if permission to publish in this form has not been obtained. If any copyright material has not been acknowledged please write and let us know so we may rectify in any future reprint.

Except as permitted under U.S. Copyright Law, no part of this book may be reprinted, reproduced, transmitted, or utilized in any form by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying, microfilming, and recording, or in any information storage or retrieval system, without written permission from the publishers.

For permission to photocopy or use material electronically from this work, please access [www.copyright.com](http://www.copyright.com) (<http://www.copyright.com/>) or contact the Copyright Clearance Center, Inc. (CCC), 222 Rosewood Drive, Danvers, MA 01923, 978-750-8400. CCC is a not-for-profit organization that provides licenses and registration for a variety of users. For organizations that have been granted a photocopy license by the CCC, a separate system of payment has been arranged.

**Trademark Notice:** Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

---

#### Library of Congress Cataloging-in-Publication Data

---

Names: Upton, Brian, 1964- author.

Title: Situational game design / Brian Upton.

Description: Boca Raton, FL : Taylor & Francis, CRC Press, 2018.

Identifiers: LCCN 2017021955 | ISBN 9781138031814 (pbk. : alk. paper) | ISBN 9781138305182 (hardback : alk. paper)

Subjects: LCSH: Video games--Authorship. | Computer games--Design. |

Games--Psychological aspects. | Game theory. | Situation (Philosophy)

Classification: LCC GV1469.34.A97 U68 2018 | DDC 794.8/1536--dc23

LC record available at <https://lccn.loc.gov/2017021955>

---

Visit the Taylor & Francis Web site at  
<http://www.taylorandfrancis.com>

and the CRC Press Web site at  
<http://www.crcpress.com>

---

# Contents

---

Acknowledgments, v

Author, vii

CHAPTER 1 ■ Introduction	1
THE PROBLEM WITH WINNING	3
WHAT IS SITUATIONAL GAME DESIGN?	5
MAKING MEANING WITH GAMES	7
SUMMARY	9
CHAPTER 2 ■ Situations, Constraints, and Moves	11
CONSTRAINTS	12
MOVES	15
THE GAME AS UNDERSTOOD	16
PRE-EXISTING CONSTRAINTS	19
INTERPRETIVE MOVES	21
SUMMARY	23
CHAPTER 3 ■ Playfulness	25
CHOICE	26
VARIETY	29
CONSEQUENCE	33
PREDICTABILITY	36
UNCERTAINTY	38
SATISFACTION	41
SUMMARY	43

CHAPTER 4 ■ Anticipation	45
CHARACTERISTICS OF ANTICIPATORY PLAY	46
CUING CLOSURE	49
THE RESULT OF ANTICIPATORY PLAY	51
CRUXES	53
SUMMARY	56
CHAPTER 5 ■ Goals	59
COHERENCE PLAY	61
EXPANSION PLAY	64
CLOSURE PLAY	67
SUMMARY	69
CHAPTER 6 ■ Methods	71
DESIGNING MOVES	74
DESIGNING SITUATIONS AND CONSTRAINTS	76
DESIGNING GAMES	78
SUMMARY	83
CHAPTER 7 ■ Narrative	85
NARRATIVE CONSTRAINTS AND SITUATIONS	86
NARRATIVE PLAY	90
GAMES AS STORIES	96
SUMMARY	98
CHAPTER 8 ■ Meaning	101
THE LUDIC SIGN	102
THE EPISTEMOLOGICAL CYCLE	104
LUDIC SEMIOSIS	108
HOW GAMES MAKE MEANING	112
SUMMARY	116

---

# Acknowledgments

---

I'D LIKE TO THANK Brenda Romero for providing the impetus for this project.

I'd also like to thank the helpful staff of the Starbucks at Olympic and Westwood in Los Angeles, where most of this book was written.

But most of all, I'd like to thank my wife and interlocutor, Elizabeth Randell Upton. The ideas contained within this book are the result of hundreds of hours of conversation between us. Without her collaboration, this book would not exist.



**Taylor & Francis**

Taylor & Francis Group

<http://taylorandfrancis.com>

---

# Author

---

**Brian Upton** is a freelance game design consultant. A 20-year veteran of the game industry, he was one of the founders of Red Storm Entertainment, where he designed the original *Rainbow Six* and *Ghost Recon*. From 2002 to 2016, he was a senior game designer at Sony's Santa Monica Studio, where he collaborated with external teams bringing innovative indie titles to the PlayStation.

He has served on the advisory boards of game design programs at University of California, Santa Cruz, New York University, and University of Limerick. He is a regular speaker at conferences such as Game Developers Conference, Games for Change, and Digital Dragons. His previous book, *The Aesthetic of Play* (MIT Press 2015), explored the relationship between games, stories, and meaning.



**Taylor & Francis**

Taylor & Francis Group

<http://taylorandfrancis.com>

# Introduction

---

**G**AMES ARE INTERACTIVE. THERE'S a give-and-take to playing a game that isn't present when we read a novel or watch a movie or listen to a piece of music. We make a move, and our opponent (or the game itself) responds, and that response affects which moves we make in the future. The outcome of a novel is predetermined; we can't change how it ends. But the outcome of a game remains in question right up until the final move, and the moves we make along the way determine what that outcome will be.

Because interactivity is so central to games, it's not surprising that a great deal of game design theory is focused on how to design good interactions. How do you structure your mechanics to create a feeling of agency? How do you write rules that offer challenging choices? How do you provide meaningful feedback? How do you create a satisfying sense of progression and accomplishment? These are all important design questions, and they're all grounded in the notion that it is primarily the quality of a game's interactions that determines its worth as a play experience.

However, while interaction may be fundamental to games, games are more than just interaction. We know this because many games feel playful even when we aren't interacting with them. The most obvious example is chess. In a game of chess, there are often long intervals between moves. And yet, even though our interactions are sporadic, our feeling of play is continuous. Playing chess doesn't consist of long stretches of boredom punctuated by occasional flurries of playfulness. Rather, a sustained feeling of playfulness spans the intervals between our interactions. Making moves is an essential part of the experience of playing chess, but if we want to understand how it feels to play chess, we also need to understand

how play unfolds when we're not moving. We need to understand non-interactive play.

Non-interactive play is easy to observe in turn-based games, but it shows up in other types of games as well. For example, in a puzzle game like *The Witness*, we may spend several minutes holding still and thinking. When we finally do interact with the game, it's merely to test our solution to see if it's correct. The play value of the puzzles in *The Witness* lies not just in the interactions they afford, but also in the opportunities for rumination they present.

A stealth game like *Metal Gear Solid* (MGS) offers similar opportunities for non-interactive play. Sometimes, the best tactic in MGS is to watch and wait—watch to learn the patterns of the guards, wait for the right moment to run or attack. These intervals of watching and waiting aren't boring—they're often the most intense and rewarding parts of the game. Combat, when it does occur, is less a game in its own right, and more a way of validating our choices during the non-interactive stealth game that preceded it.

Horror games offer many of the same non-interactive design challenges as stealth games. The play of a horror game exists largely in our imaginations. What makes a game scary is less a matter of what it does to us, and more a matter of our anticipation of what it might do. The interactivity of the horror game *P.T.* is limited to opening doors, walking, and looking. We have control over the pace and order that events unfold, but we're unable to change the overall flow or outcome of the experience. Indeed, it is the very inevitability of our doom that makes the game effective. We know that awful things lie ahead in *P.T.*'s claustrophobic hallways, but, horrifyingly, we lack the agency to avoid them.

Even games that seem action-packed often contain fleeting bursts of non-interactive play. We hesitate for a moment in the corridor of a first-person shooter, considering which enemies might lie around the next corner. We use a long section of straight track in a racing game to prepare for the hairpin turn we can see approaching. We linger at a safe spot in a platform, estimating the timing and risk of our next series of jumps. The fun of these games comes not just from the moments when we act, but from the moments of stillness that proceed them.

We can draw an analogy between interactivity in games and the cut in cinema. Cuts allow a cinematographer to do things that a theatrical director can't. Images can be juxtaposed in meaningful ways; the narrative can leap backward or forward in time, allowing the audience to imagine what

must have happened during the missing interval. The cut is a powerful aesthetic tool and a fundamental, defining characteristic of film as an art form.

But, films are more than just sequences of cuts. The cut is a thing that a film *can* do, but it's not a thing that a film *must* do. A film doesn't cease being a film during a long continuous shot. The quality of a film isn't determined by how many cuts it contains. The cuts in a film are strategically deployed to produce particular effects; they're not sprinkled around at random just to keep the film from feeling like a stage play.

So it is with interactivity in games. Interactivity is a thing that a game *can* do, but it's not a thing that a game *must* do. A game doesn't cease being a game if it contains long stretches where the player doesn't interact. The amount of interactivity in a game doesn't determine how good it is. Interactivity is a powerful tool that can be strategically deployed within a game to produce particular aesthetic effects, but it's not the entirety of the play experience. Sometimes, the most playful thing a game can do is hold still.

## THE PROBLEM WITH WINNING

---

There's another way that games differ from other forms of entertainment: games are winnable. The rules of a game specify an arbitrary goal that we're supposed to try to reach, and, as the game unfolds, our moves are made with that goal in mind. Good moves carry us closer to victory, and bad moves carry us further away.

This is true whether the game is competitive, cooperative, or a solo experience. Sometimes, we may work together to try to accomplish a single, shared goal, and other times we may have different goals and work in opposition to each other. But regardless of whether we are competing or collaborating, our moves are always directed toward satisfying the arbitrary win condition set out in the rules.

Books and movies and music aren't like that. There's no way to win a novel. When we watch a movie, we're not trying to work toward some specific ending. When we listen to a piece of music, we're not thinking about how to defeat our fellow audience members. Partially, this is because these mediums aren't interactive. Even if we decide that we want a movie to end in a particular way, there's no way for us to make that happen.

But, while winning and interactivity are related to each other, they're not inseparable. It's possible to have one without the other. A toy like a ball is very interactive—there are lots of different ways to play with it—but

it doesn't have a built-in win condition. There's nothing inherent in a ball that makes bouncing it a "good move" and throwing it a "bad move." If we want to build a game around a ball, we need to create other rules that impose a win condition on its free-form interactivity.

Furthermore, some books *are* winnable. Murder mysteries are books, but they're also puzzles. You win a murder mystery by solving the crime before the detective does. The novel isn't interactive—you can't change how it ends. But it does present you with a goal and the opportunity to work toward it. The pieces you move when you read a murder mystery aren't pieces on a board, they're pieces in your mind—suspects and suppositions and hypotheses. You're trying to figure out an arrangement for these mental pieces that fits within the evidence of text. A murder mystery is winnable without being interactive.

Just as with interactivity, giving the player a way to win is a thing that a game *can* do, but it's not a thing that a game *must* do. A game doesn't cease being a game if it's unwinnable. How difficult it is to win a game doesn't determine how good it is. Winning is a tool that can be deployed within a game to produce particular aesthetic effects, but it's not essential for a game to feel playful.

The most obvious example of this are tabletop role-playing games like *Dungeons and Dragons (D&D)*. The rules of *D&D* contain a number of explicit goals. Players are expected to stay alive, to accumulate treasure, to level up their characters—and these goals structure how much of the gameplay unfolds. Players try to make moves that maximize their success within this framework—they try to employ the most powerful attacks, discover the biggest caches of loot, seek out the most challenging monsters. Good moves are moves that carry them closer to these win conditions, and bad moves are moves that carry them further away.

But, sometimes, players deliberately choose losing moves. A player may charge into near-certain doom because they're playing a Lawful Good paladin who has sworn to protect the weak. A player may throw away a rare spell book because they're playing an illiterate barbarian who doesn't know how valuable it is. In addition to the explicit goals expressed in the game's rules, players possess a set of intrinsic motivations derived from their sense of narrative, character, and situation. And these intrinsic motivations also shape their trajectory through the play space.

So, play is more than just winning. Sometimes, play is performance—it's trying on different identities or creatively expressing your own personality.