

Title	Game Refinement Theory and its Application to Fighting Game and Action Game
Author(s)	張, 沢良
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Description	Supervisor: 飯田 弘之, 情報科学研究科, 修士

Abstract

Human cannot live without game in social life nowadays. We reached a level that video games have excitement about its potential, and now a lot of researchers and related workers are going for larger studies to actually make a game more entertaining and exciting. In addition a game as Ninth Art has its own special humanistic value. With such backgrounds game informatics has been established as a new research area in the old of information science and computer science. This thesis will focuses on the game refinement theory applications and its real world impact.

Game refinement idea is an unique theory that has been proposed based on the uncertainty of a games outcome. Game refinement measure was derived from the game information progress model and has been applied in the traditional board games and sports games. Video games started as simple blocks of light, but now they have heralded revolution of entertainment. The era of video games has arrived. Video games has accompanied the grown up of entire generation and plays an increasingly important role in the world of games. The challenge prevalent is the application of the theory in the domain of numerous video games, especially the popular electronic video games, such as fighting games and action games.

This research emphasizes on fighting games and action games and short abstractions and introductions are been made in the part related to fighting games. Meanwhile, distinguished fighting games are enumerated. This research picked up 10 games which are remarkable and have been well received among players. Data has been analyzed by game refinement theory shows incredible results. In some parts of action games, we have picked up the action game series which are well-known internationally, the series of God of War. Via collecting data, moreover, analysis and calculate data with game refinement theory. The third part of this research is about shooting games. Game classifying became more and more obscure today so many action games, even fighting games have contained factors of shooting. To facilitate researches from now on, this research also made some exploitation of programs about data analysis of one shooting game on antiquated FAMICOM.

In conclusion, the target of this research is to make contribution to apply the game refinement theory in these new areas and support the effectiveness of game refinement theory. Game refinement theory will make more remarkable contributions to game evaluating and game design in future.

Keyword: Game refinement theory, Fighting game, Action game, Game design, Mathematical model of game.