JAIST Repository

https://dspace.jaist.ac.jp/

Title	視線追従装置を用いたリズムアクションゲームにおけ るスキルの分析
Author(s)	小原,卓也
Citation	
Issue Date	2010-03
Туре	Thesis or Dissertation
Text version	author
URL	http://hdl.handle.net/10119/8898
Rights	
Description	Supervisor:藤波努,知識科学研究科,修士



Japan Advanced Institute of Science and Technology

An Analysis of skill in Rhythm Action Game with an Eye Tracker

Takuya Ohara

School of Knowledge Science, Japan Advanced Institute of Science and Technology March 2010

Keywords: eye movement, Sensory-motor learning, Open-Skill, video game, Coordination training

The importance of skills has been increased recently as manual labors are still widely on demand. We have investigated proper ties commonly observable among variety of skills. However, it is not easy to study the embodied knowledge, i.e., the items of knowledge enabling skills, given the complexity of tacit knowing, especially when its contexts are not specified. Therefore, we focused on a rhythm action game to investigate open skill, a class of skills whose contexts are unknown, with a hope that our study might cast a new light on tacit knowing under unspecific contexts. We analyzed the skill required toper form the rhythm action game using an Eye Tracker. We found through our experiment that the experts fix their eyes on a particular point while they play the game. Similar phenomena are observed in other activities, where the skills are thought to be open one. The experts are found to control their visions by limiting the time to watch items so that they can perform the task most effectively, which suggests they may automate the perception-action cycle.

Copyright © 2010 by Takuya Ohara