

COMPLETION REPORT

【 Research Summary】

This research aims to examine how robot theater series of dramatist Hirata Oriza and roboticist Hiroshi Ishiguro is directed, and its implications for robotics research. To fulfill that aim, through literature review, going to the robot theater, and conducting interviews, I firstly explore the themes of Hirata's robot theater series and the acting of robot actors. By characterizing features of Hirata's contemporary colloquial theater and his ideas about theatrical reality as well as his theater performance, it is argued that Hirata's robot theater series embodies principles of contemporary colloquial theater theory. However, it is also found that the colloquial style of robot actors which complies with contemporary colloquial theater theory has its pros and cons. It successfully creates a touching performance; nevertheless, possible issues such as the mismatch between language competence and smoothness of gestures of the robot actors arise concerning the creation of characters of the robot actors. The result of this strand of research is to be published in *Taipei Theatre Journal*, No. 19 with the title "Contemporary Colloquial Theory and Robot Theater of Oriza Hirata" in 2014.

Clarification between the relationship between Hirata's contemporary colloquial theater and his robot theater series builds up a background for exploring the implications of Hirata's robot theater on robotics research. Since Hirata's robot theater was brought about by the close collaboration between Hirata and Ishiguro, and their robot theater has up until now found no equivalent in Japan, it is hoped that international comparison serves to shed light on how robot theater has impact on robotics as conferences on robotics have begun to hold workshop on the mutual influences of robotics and performing arts. Therefore I take a robot theater performed in Taiwan in 2008 as a comparative case. It is found that the contrast of ideal versus interactive, views on the content and role of robotic technology in facilitating human-robot interaction in the two cases points to how robot theater, and robot technology at large, are differently perceived by the roboticists. The Hirata-Ishiguro robot theater epitomized a society-based mode of robotics research which regards theater as a site that helps to produce knowledge for furthering smooth human-robot interaction. The preliminary result of this comparison will be submitted to a journal in Science, Technology, and Society. As many American and European teams began to explore the potential of robot theater for human-robot interaction, it is hoped that a further study of international comparison will clarify the relationship between robot theater and robotics.

Publication of the Results of Research Project:

Verbal Presentation (Date, Venue, Name of Conference, Title of Presentation, Presenter, etc.)

- (1) November 18, 2012, National Sun Yat-sen University, Kaohsiung, Taiwan. The 3rd Annual Meeting of Japanese Studies. "The Relationship between Robots and Humans in Robot Theater in Japan," Presented by Tzung-De Lin and Yi-Jen Yu.
- (2) September 14, 2013, National Yang-Ming University, Taipei, Taiwan. Making Knowledge Spaces: Workshop on Taiwanese Technology and Society. "How Robots Are Made to Act," Presented by Tzung-De Lin.

Thesis (Name of Journal and its Date, Title and Author of Thesis, etc.)

- (1) Tzung-De Lin and Yi-Jen Yu, "Contemporary Colloquial Theory and Robot Theater of Oriza Hirata," *Taipei Theatre Journal*, No. 19 (Accepted and will be published in January 2014) (in Chinese)
- (2) Tzung-De Lin, "Theater as Site for Knowledge Production and Technology Demonstration: Theatrical Robots in Japan and Taiwan," paper in preparation for submission to *East Asian Science Technology and Society* in 2014. (in English)

Book (Publisher and Date of the Book, Title and Author of the Book, etc.)