

I Sing the Body Electric

An Experimental Theatre Play with Robots [Video Abstract]

Jakub Zlotowski, Timo Bleeker, Christoph Bartneck
HIT Lab NZ, University of Canterbury
Christchurch, New Zealand
{jakub.zlotowski, timo.bleeker}@pg.canterbury.ac.nz,
christoph.bartneck@canterbury.ac.nz

Ryan Reynolds
Theatre & Film Studies, University of Canterbury
Christchurch, New Zealand
ryan.reynolds@canterbury.ac.nz

Index Terms—Robot, performance, theatre, robotic puppeteering.

INTRODUCTION

Robots seem to be natural candidates to be used as actors in theatre plays. The interest in robotic actors in performance led to several publications [1–3] and was also included in HRI 2012 conference video session [4], [5].

Between 19th of June 2012 and 1st of July 2012 Free Theatre Christchurch in collaboration with the HIT Lab NZ (University of Canterbury) performed a devised play “I Sing the Body Electric” for general audiences, directed by Peter Falkenberg. The plot was based on the infamous Don Juan legend. Don Juan is perpetually interested in the process of seduction; as soon as he “attains” a woman, he loses interest and proceeds to seduce the next. In this respect, we first world citizens are like Don Juan with respect to technology: never satisfied by what we have attained, and always looking to the next seduction. The production explored this theme via the latest interactive technologies.

Before the audience entered the immersive performance space, in the foyer space, two NAO robots performed an “overture” to the performance, reciting some stanzas of Walt Whitman’s poem known as “I Sing the Body Electric” [6]. The stanzas referred to unique qualities of female and male bodies, which were “illustrated” by the robots’ actions, although these illustrations became increasingly insufficient, as the text progressed from “hips” and “bend of legs” to “love-flesh swelling and deliciously aching”. The perceived gender of the robots was manipulated by the color of their LEDs, voice shaping and movement. The “male” robot described the body of the “female” robot and vice versa. Finally, to astonishment of the audience, the gender of the robots was swapped: the “male” robot became “female” and “female” became “male”.

The video was recorded on the first day of the play during the première. It shows the audience’s reaction to the robot “overture” and some of the verses recited by the robots.



REFERENCES

- [1] A. R. Chatley, K. Dautenhahn, M. L. Walters, D. S. Syrdal, and B. Christianson, “Theatre as a Discussion Tool in Human-Robot Interaction Experiments - A Pilot Study,” in *Advances in Computer-Human Interactions*, 2010. ACHI '10. Third International Conference on, 2010, pp. 73–78.
- [2] C. Breazeal, A. Brooks, J. Gray, M. Hancher, J. McBean, D. Stiehl, and J. Strickon, “Interactive robot theatre,” *Commun. ACM*, vol. 46, pp. 76–85, Jul. 2003.
- [3] N. Mavridis and D. Hanson, “The IbnSina Center: An augmented reality theater with intelligent robotic and virtual characters,” in *Robot and Human Interactive Communication*, 2009. RO-MAN 2009. The 18th IEEE International Symposium on, 2009, pp. 681–686.
- [4] S. Lemaignan, M. Gharbi, J. Mainprice, M. Herrb, and R. Alami, “Roboscopia: a theatre performance for a human and a robot” in *Proceedings of the seventh annual ACM/IEEE international conference on Human-Robot Interaction*, 2012, pp. 427–428.
- [5] W.-J. Kim, S.-W. Choi, and C. H. Lee, “MARIOBOT: marionette robot that interact with an audience,” in *Proceedings of the seventh annual ACM/IEEE international conference on Human-Robot Interaction*, 2012, pp. 409–410.
- [6] W. Whitman, “I Sing The Body Electric,” *Poetry X*. <<http://poetry.poetryx.com/poems/585/>>. Accessed 2012 Nov 27.