

# The Mirror of Transfiguration

Mayuko Kanazawa\*, Masataka Imura\*\*, and Ichiroh Kanaya\*\*

\*MayuArt.com, \*\*Osaka University, Japan,



Fig.1: The Mirror of Transfiguration

## 1. Introduction

*The Mirror of Transfiguration* is an interactive media-art for showing native Canadians' spiritual image to children. It immerses its viewers into pictures of Canadian nature, and the viewers will transform into ones of the spiritual animals of Canadian tradition.

The authors put various computer-based imaging technologies including posture recognition, hand-drawing and hand-drawing-like computer graphics, animation, image morphing, real-time range sensing, into this system.

The Mirror of Transfiguration had been displayed at National Museum of Ethnology, Japan, as a communicational/educational media as a part of its special exhibition "Canadian Spirit" from September 10 to December 8, 2009. Over 30,000 people (most of them were children) enjoyed and simultaneously learned spiritual image of native Canadians.

## 2. The Mirror of Transfiguration

An image of a viewer is mirrored in a big screen, however the background is replaced by Canadian nature (see Fig. 1). Once the viewer takes a pose, e.g. raising his/her hands, the Mirror of Transfiguration detects the posture of the viewer and make the viewer transfigured into an animal corresponding to the posture. The animal walks, flies, or swims around the viewer and then disappear.

The authors specially focused on the following points.

- *The meaningful media art must also be playful and joyful.* The real-time response of the Mirror of

Transfiguration makes participants play and enjoy the media.

- *The Mirror of Transfiguration must be friendly especially to children.* Since children have pure minds, the authors focused the target of this work to children from the beginning. It is quite natural for authors to develop hand-drawn and hand-drawn-like computer-generated animations for the system.

- *Showing transition between reality and fantasy is a key point of arts.* A great fantasy writer Michael Ende used to show us that going reality (this world) and fantasy (Fantastica) back and forth is so important both to the real life and the dreams of us. The Mirror of Transfiguration shows morphing transition of human-to-animal transfiguration, so that the viewers could easily understand connection between reality and fantasy.

## 3. The Implementation

The system is based on Intel Core 2 Duo E6600 (2.4GHz) 2GB RAM PC equipped with NVidia GeForce 9800 GTX+ GPU (512MB RAM) with MS Windows XP SP3 OS; and two individual cameras: Sony HDR-CX500V high-definition video camera, and Mesa Imaging SR4000 real-time range finder.

## 4. Conclusion

The Mirror of Transfiguration is created upon a philosophy that arts are able to bring spiritual images to people from different cultures; i.e. the art can be, and possibly should be, a great communication media. The authors would like to conclude that the Mirror of Transfiguration is a joyful, playful, and meaningful media art that everyone can participate and learn a piece of Canadian spirit.

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## References

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