

Face-off in the Magic Circle: Getting Players to Look at Each Other, not the Screen

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ABSTRACT

This game prototype, entitled *Face-off in the Magic Circle*, demonstrates an underused and engaging application of physical interfaces for digital games. The game pairs a gestural interface together with a minimally graphical game in order to coax players into looking at *each other*, rather than at the screen. By combining the face-to-face interactions of traditional, non-digital games with the computational power and multimedia capabilities of videogame consoles, we hope to illuminate promising opportunities for adding new depth to console gameplay.

Categories and Subject Descriptors

K.8.0 [Personal Computing]: General – Games
H.5.2 [Information Interfaces and Presentation]: User Interfaces – Auditory feedback, user-centered design

General Terms

Design, Experimentation, Human Factors

Keywords

Game Design, Experimental Games, Gestural Interfaces

1. BACKGROUND

The growing popularity of physical game interfaces such as Nintendo's Wiimote, Sony's EyeToy, and Microsoft's upcoming Project Natal has led to a concomitant increase in interest within the academic literature. In particular, a number of research projects have utilized acceleration data from the Wiimote to develop gesture-based control schemes [1; 2]. Typically, research of this kind has been motivated by the hope that such interfaces will be more "fun" or "intuitive."

In practice, however, we might reasonably doubt whether these input modalities alone, in them of themselves, offer a radically different gameplay paradigm. If we accept that face-to-face contact is one important dimension of social interaction, we might ask how digital games can more effectively break gameplay out of the traditional arrangement between player and screen.

2. THE GAME

Face-off is a two-player fighting game prototype designed for the Nintendo Wiimote controller. The game allows players to sling spells at one another in a game of dexterity and strategy. Using their Wiimote as a wand, players draw "runes" (gestures) to chain together different spells. The game employs a feed-forward neural network that uses accelerometer data to distinguish between three pre-trained gestures. The very limited number of runes serves to reduce the list of input gestures that the player must remember.

But this prototype should not primarily be viewed as tech demo; rather, our contribution lies in the game design and the interface design. Unlike many so-called "augmented reality" games, *Face-off* does not require specialized hardware, but instead takes advantage of familiar, consumer-level technology. And unlike previous gestural wizard-themed game experiments [1; 2], *Face-off* removes almost all screen-based feedback; aside from health bars and abstract lighting effects, only the background texture is rendered. This design choice, aimed at freeing the players from needing to look at the screen, was directly inspired by our work on *Dark Room Sex Game* (2008), a no-graphics, multiplayer rhythm game that we also designed for the Wiimote. In developing and testing that game, we were struck by how facial expressions (of both teammates and opponents) appeared to add new strategic and emotional layers to the gameplay.

Likewise, with *Face-off*, our hope is to re-energize the feeling of *playing with each other*, as opposed to just playing with a game system. In most multiplayer videogames, players must carefully follow the action rendered on screen in order to understand the state of the game. However, in *Face-off*, as in the classic game *Rock/Paper/Scissors*, the action takes place off the screen and in the physical world. Because physical gestures are much more discernable than button presses, players can literally watch their opponent to see what he or she is doing; along with audio and haptic feedback, the gestures themselves can replace feedback usually rendered on screen.

Gameplay videos and a downloadable demo are available at our website: www.inthemagiccircle.com

3. ACKNOWLEDGMENTS

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4. REFERENCES

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