Is Hacking the Brain the Future of Gaming?

An interview with Karen Palmer

Among the four keynote speakers at DiGRA2015 was digital artist and film maker Karen Palmer. On May 16, in her talk "Is Hacking the Brain the Future of Gaming?", she presented the neurogame SYNCSELF 2 in which the player's thoughts are read and transferred onto an avatar. In a short interview, she explains what the "diversity of play" means to her and talks about the aesthetic potential of combining film and games.

Question: You have developed, and are about to develop, new and innovative formats that combine film with performance, parkour running, and games. Your performance/game *SYNCSELF 2* is an interactive movie that can be performed or navigated by electric signals retrieved from the brain of the player or "interactor". Whenever the interactor focuses and is not distracted by the visuals of the film, the audience, or by his or her diverting thoughts, the characters of the film succeed in their attempt to overcome parkour hurdles. When the interactor loses focus, the characters of the film fail. Is this a film you directed or is it a game you designed?

Karen Palmer: It is both: interactive film and a game. You watch the film and you play the game.

Q: It seems fair to say that it is not only the content of your projects, but also the media you embed your pieces within, are highly diverse. The title of DiGRA2015 was "Diversity of Play: Games – Cultures – Identities". What does "diversity of play" actually mean for you?

KP: Diversity of play means playing in many different formats and genres to create an innovative audience journey through a gaming experience.

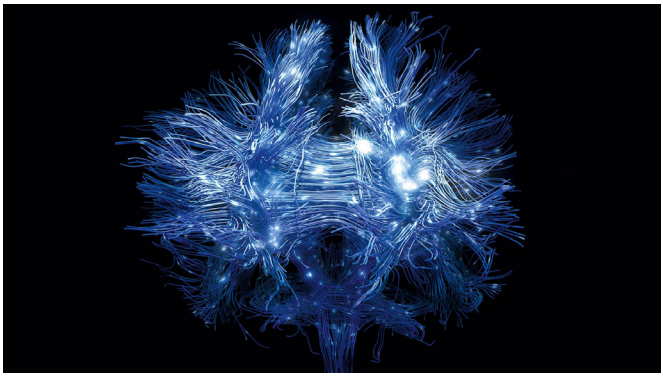
Q: How did your personal journey arrive at the crossroads of parkour and interactive film?

KP: In 2009 I became a committed forerunner and, inspired by my passion for parkour, I was encouraged to "move through fear", not just while training but within my life. I left the security of a successful career as a creative director and music video director to pursue my passion to be a visual artist and develop my voice as a storyteller.

As a result, I have developed my own unique interactive transmedia experiences that innovatively fuse well-being with art, film, parkour and gaming experiences through tech and storytelling to create an experience where the user is the remote control and the action is completely dependent on the psychological state of the user. My objective is to inspire and empower the user through storytelling.

Q: Much of your work is located at the intersection of visual art, interactive film and gaming. How would you describe the (aesthetic) potentials of combining film and games?

KP: The aesthetic potentials of combining film and gaming offer an exciting opportunity to create a fully immersive cinematic experience.



Transforming film from a purely linear journey, of which the director is the sole author, into a journey with multiple potential story structures of which the audience is the controller of the experience. This approach creates a bespoke, personalised and highly satisfying journey for the viewer/player.

Unlike animation, film is a more visual reality-based gaming experience so the type of immersion into this world possess a different set of dynamics and therefore has the potential to be a more powerful journey.

Q: *SYNCSELF 2*, to name one of your last projects, combines "neurogaming" with film. What exactly does the term mean and how do neurogaming techniques transform the gaming experience?

KP: Neurogaming is where your mind and body meet game play. It is about integrating one's full nervous system into the gaming experience for the purposes of entertainment, health, education, wellness and more.

Neurogame developers are using the latest emotional, cognitive, sensory and behavioural technologies to create

radically compelling experiences to engage and entertain gamers worldwide.

Q: From your point of view, what are the risks and opportunities of the more and more blurred distinctions between games and non-games?

KP: I am not aware of any potential risks, however, I see a lot of potential opportunities. New forms of learning and self-development through an engaging format. The experience enables the user to develop self, and gain practical cognitive skills such as focus, enabling the user to become more productive through a training experience. Acquiring real world skills through this unique form of "entertainment-meets-gaming" will enable the user to understand their strengths and weakness better.

There are quite a few examples of pieces that build upon interactive gaming experiences. To mention just a few, recent developments include:

SYNCSELF 2 created an environment for the user where they are able to explore the concept of self. The user then became aware of process of focus. As a result they were then able to access it at will.

SuperBetter is another application that helps you achieve your health goals — or recover from an illness or injury — by increasing your personal resilience. Resilience means staying curious, optimistic and motivated even in the face of the toughest challenges.

Q: Karen, could you please give one more example here?

KP: *Nevermind* is a biofeedback-enhanced adventure horror game that takes you into the dark and twisted world of the subconscious.

As you explore surreal labyrinths and solve the puzzles of the mind, a biofeedback sensor will monitor how scared or


SYNCSELF

stressed you become moment-to-moment. If you let your fears get the best of you, the game will become harder. If you're able to calm yourself in the face of terror, the game will be more forgiving.

Nevermind strives to create a haunting gameplay experience that also teaches you how to be more aware of your internal responses to stressful situations. If you can learn to control your anxiety within the disturbing realm of *Nevermind*, just imagine what you can do when it comes to those inevitable stressful moments in the real world …

Q: In science fiction, plugging into the brain has often quite evil connotations. I can see from your artwork that the actors/runners/players look quite happy with what you do with them, but could you imagine ethical problems with neurogaming?

KP: Neurogaming is where the mind and body meet game play. It's where your full nervous system is integrated into the gaming experience by using new sensor technologies, output systems, and game design techniques.

I do not envisage any ethical issues at this time, as it is merely another form of evaluating data, which is becoming all the more pervasive in society.

Q: Can you give us a description of your forthcoming piece *FUTURESELF*?

KP: *FUTURESELF* will build upon the success of *SYNCSELF 2* and has the potential to create an even more significant impact culturally through a more precise user experience. *FUTURESELF* will build upon this functionality to measure the vibrational frequency that we as humans transmit.

Q: Karen, what is "vibrational frequency"? Can you please explain in a few sentences?

KP: *FUTURESELF* will monitor the vibrational, emotional, and mental frequency that the user is operating at and, through the immersive storytelling experience, be guided to raise their vibrational level. The process of interacting with the installation will improve the user's sense of awareness and increase their sense of mindfulness enabling them to become their "future self" through the experience. The functionality will be both a solo and multi-player experience, where two players are able to compete to become their "future self".

Q: *Thank you very much for the interview.*