Cyberselves symposium, 14th and 15th October 2015

We are pleased to advertise a two-day symposium on virtual reality and telepresence on the theme of "Cyberselves in Immersive Technologies". The symposium is sponsored by the UK Arts and Humanities Research Council and the Oxford Martin School and will be hosted at the University of Oxford on the 14th and 15th October 2015. Website https://cyberselves.wordpress.com

Our symposium will be multi-disciplinary with contributions from technologists, psychologists, neuroscientists, philosophers and cultural theorists looking at the future societal and ethical impacts of virtual reality and immersive technologies.

Technology demonstration: After the symposium has ended on the first day, there will be a showcase of new technologies and current research into virtual reality, augmented reality and teleoperation (approximately 5.30pm on 14th October).

Venue: Oxford Martin School, Broad Street, Oxford

Date and time: 14th and 15th October 2015

Booking: Free to attend and all welcome, however booking is required. Book online at https://v1.bookwhen.com/uehiro

Wednesday 14th October

9.30   Welcome and opening remarks

9.45   **KEYNOTE SPEAKER: *Dr Johnny Hartz Søraker:*** *'Virtual Environments and Subjective Well-being'*

Dr Hartz Søraker is assistant Professor of Philosophy of technology at the Department of Philosophy, University of Twente. His main research interests lie in the intersections between Information Technology, on the one hand, and both theoretical and practical philosophy, on the other. He has published and lectured extensively on issues such as the ethical, societal and psychological effects of technology (especially related to the notion of well-being), Internet governance and the moral status of information.

11.00   Break

11.25 SYMPOSIUM SESSION

- *Dr Blay Whitby: 'Virtually anything goes: what, if any, are the ethical limits on behaviour in virtual worlds?'*

Dr Whitby is a philosopher and ethicist at the University of Sussex, working on the social impact of new and emerging technologies. He is a leading researcher in the field and the author of many books, chapters and papers on the subject including "On Computable Morality", "Reflections on Artificial Intelligence: The Legal, Moral and Ethical Dimensions and "Artificial Intelligence, A Beginner's Guide". Dr Whitby is a member of the Strategic Ethics Committee of BCS The Chartered Institute of IT and ethical advisor to the Royal Academy of Engineering.

- *Prof Ralph Schroeder: 'Ethical and Social Issues in Shared Virtual Environments Revisited'*

Prof Schroeder is Professor at the Oxford Internet Institute, University of Oxford. He has interests in virtual environments, social aspects of e-Science, sociology of science and technology, and has written extensively about virtual reality technology. His current research is mainly related to e-science.

12.40 Lunch

13.40 KEYNOTE SPEAKER: *Prof Henrik Ehrsson: 'Neural substrates of senses of body ownership and self location'*

Prof Ehrsson is a Professor in the Department of Neuroscience, Karolinska Institutet. Within the field of cognitive neuroscientist, he is interested in the problem of how we come to sense that we own our body. He thinks the key to solving this problem is to identify the multisensory mechanisms whereby the central nervous system distinguishes between sensory signals from one's body and from the environment. By clarifying how the normal brain produces a sense of ownership of one's body, we can learn to project ownership onto artificial bodies and simulated virtual ones; and even make two people have the experience of swapping bodies with one another. This could have important applications in the fields of virtual reality and neuro-prosthetics.

14.55 Break

15.20 SYMPOSIUM SESSION

- *Prof Patrick Haggard: 'Re-engineering the relation between self and body: private experience and public space'*

Prof Haggard is Professor of Cognitive Neuroscience at the Institute of Cognitive Neuroscience, University College London. He has two major research themes. The first is the cognitive neuroscience of voluntary action. Experiments in this theme

attempt to link the subjective experience of intending and performing manual actions to the brain processes that occur before and after actual movement. The second research theme is the representation of one's own body. How does the brain create and maintain a representation of one's own body as a physical object? How is this representation influenced by current sensory inputs, such as touch and pain? How do such body representations contribute to a sense of self? He addresses these questions both in perceptual experiments, and in measures of brain activity elicited when subjects refer to a cognitive representation of the body.

- ***Prof Paul Verschure:*** *TBC*

Prof Verschure is an ICREA Research Professor in the Department of Information and Communication Technologies at Universitat Pompeu Fabra. He works on biologically constrained models of perception, learning, behaviour and problem solving that are applied to wheeled and flying robots, interactive spaces and avatars. Prof Verschure's aim is to find a unified theory of mind, brain and body through the use of synthetic methods and to apply such a theory to the development of novel cognitive technologies. He has pioneered novel VR based augmented feedback systems that are applied to the rehabilitation of a number of pathologies including stroke, TBI and Alzheimer's disease.

16.30   Symposium day one close – PAYG drinks at Kings Arms

17.30   Virtual Reality Tech demo

18.30   End day one

19.30   (Dinner for speakers and Cyberselves group)

Thursday 15ᵗʰ October

9.45   **KEYNOTE SPEAKER:** *Dr Orit Halpern: 'The Smart Mandate: A Brief History of Ubiquitous Computing and Responsive Environments'*

Dr Halpern is an assistant professor at the New School for Social Research/Eugene Lang College in History and an affiliate in the Culture and Media Studies Department and in the Design Studies MA program at Parsons the New School of Design. In her work, she studies the histories of digital technologies, cybernetics, the human and cognitive sciences, and design. She especially focuses on histories of big data, interactivity, and ubiquitous computing.

11.00   Break

11.25 SYMPOSIUM SESSION

- ***Prof Jonathan Freeman:*** *TBC*

Prof Freeman is Professor of Psychology and Managing at Goldsmiths, University of London. He is a leading expert in media psychology and human factors of digital media. Taking as his starting point fundamental psychology research and methods, Jonathan has developed and applied a body of knowledge to the evaluation and optimization of digital media products and services, focusing both on user experience and from the user and provider perspective on delivering, monetizing and experiencing better digital media products and services.

- ***Dr Tom Tyler:** 'How to Lose at Videogames (Repeatedly)'*

Dr Tyler is Lecturer in Digital Culture at the University of Leeds. His research is interdisciplinary, engaging with game studies, animal studies, cultural studies, critical theory, history of ideas, philosophy, media studies, English studies, film studies, and the conceptual dimensions of other fields. Amongst other research areas, Dr Tyler is interested in digital games, especially in their impact and import as a medium or technology, and in the distinct forms of participation and engagement that they make possible.

12.40 Lunch

13.40 **KEYNOTE SPEAKER: *Prof JoAnn Difede:** 'On the precipice of a paradigm shift: Novel therapeutics for PTSD and Anxiety disorders'*

Prof Difede is a Professor, Department of Psychiatry at Weill Medical College of Cornell University, an Attending Psychologist at the New York-Presbyterian Hospital/Weill Cornell Medical Center, and Director of the Program for Anxiety and Traumatic Stress Studies (PATSS). She is internationally recognized for her pioneering work using virtual reality technology in the treatment of PTSD consequent to the WTC attack of September 11, 2001, and more recently in the treatment of combat-related PTSD.

14.55 **Final remarks and symposium wrap up:** Julian Savulescu and Tony Prescott

15.15 Symposium close

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