

The Ministry of Interfaces (Doors)

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Abstract. For those, who measure the length of their lives in numbers of experiences instead of years lived; for those, who strive to pack the knapsack of their lives optimally, maximizing its utility. Interfaces can help to go beyond the traditional trio of body, mind, and spirit serving as doors connecting them. These doors, however, could allow for an unauthorized entry and pose threat to our safety, if not designed or protected properly. This science fiction prototype allows the reader to peep through one of the doors, imprudently left opened by someone from the era of Halls – the era that followed the times of virtual reality, computer games, and the Internet.

Keywords. Interfaces, intelligent environments, embodiment, immersion, personal and social space, security, encryption

References

- [1] Y. Kovalchuk, Scientific Theatre: Multidisciplinary Approach to Designing Intelligent Environments, *Workshop Proceedings of the 7th International Conference on Intelligent Environments, IOS Press* (2011).
- [2] Y. Kovalchuk, V. Callaghan, A Self-Organizing System for Online Maintenance of a Living Organism, *6th International conference on Intelligent Environments (2010)*, 283-288.
- [3] F. Sepulveda, An Overview of BMIs. *International Review of Neurobiology*, 86 (2009), 93-106.
- [4] A.B.T. Hopkins, K.D. McDonald-Maier, E. Papoutsis, W.G.J. Howells, Ensuring data integrity via ICmetrics based security infrastructure, *IEEE, NASA/ESA Conference on Adaptive Hardware and Systems* (2007), 75-81.
- [5] Y. Kovalchuk, Knowing yourself, *Intelligent Environments, Creative Science 2010, IOS Press* (2010), 271-280.
- [6] J. Pforlich, *Handbook for Laban Movement Analysis*, 1977.
- [7] M. van Gerven, J. Farquhar, R. Schaefer, R. Vlek, J. Geuze, A. Nijholt, N. Ramsey, P. Haselager, L. Vuurpijl, S. Gielen and P. Desain, Topical Review: The brain-computer interface cycle, *Journal of Neural Engineering* 6 (2009), 1-10.
- [8] D. J. McFarland, D. J. Krusienski, W. A. Sarnacki, and J. R. Wolpaw, Emulation of computer mouse control with a noninvasive brain-computer interface. *Journal of Neural Engineering* 5(2) (2008), 101-110.
- [9] T. Geng, J. Q. Gan, H. Hu, A self-paced online BCI for mobile robot control, *International Journal of Advanced Mechatronic Systems* 2 (1/2) (2010), 28-35.
- [10] E. R. Miranda, W. L. Magee, J. J. Wilson, J. Eaton, and R. Palaniappan, Brain-Computer Music Interfacing (BCMI): From Basic Research to the Real World of Special Needs, *Music and Medicine* (advance online publication), doi:10.1177/1943862111399290 (2011).
- [11] V. Gallese and A. Goldman, Mirror neurons and the simulation theory of mind reading, *Trends Cogn. Sci.* 2 (1998), 493-501.

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