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## Body in Cyberspace

BODY

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## Editorial Preface

The target theme for the present issue of the *PsychNology Journal* is 'body in cyberspace'. The goal is to avoid simplistic depictions of cyberspace as a purely symbolic realm and to problematize taken for granted separations between real and physical, corporeal and symbolic. Narratives of a disembodied life in cyberspace imbue the literature without adding any cue to the understanding of our daily, mundane experience in technologically mediated environments. Interfaces are developed today that provide stimuli to the perceptual, motor and physiological human system, so that it is hard to say where the physical ends and the virtual begins. In other words, bodily coordinates and functionalities are ready for researchers to be investigated, putting aside utopias and obsolete presuppositions. In addition to the papers addressing the target theme, this issue also contains papers on ergonomics, emotional presence, clinical treatments with virtual reality.

The opening paper, '*From Cyborgs to Cyberbodies: The Evolution of the Concept of Techno-Body in Modern Medicine*' by Gaggioli, Vettorello and Riva tries to retrieve the different concepts that have been invoked to describe the digitally-reframed body thereby reminding us that bodies are not natural objects, but historical cultural products. The authors distinguish among three concepts, namely 'cyborgs', 'cyberbodies' and 'transparent bodies' that have informed the medical applications of computer technology so far.

Alzola Romero's paper '*WHOIS? Identity: Collectivity and the Self in IRC*' illustrates an ethnographic study of a virtual community, \*rudos, and the nature of its members' identity. The text has an incremental progression, each step redefining the conclusion of the previous one, abandoning individual identities in favour of collective ones, dominance of one reality over another in favour of interdependence and exchange. Some common refrains are challenged, such as the postmodernist claim that the relaxation of some physical limits through digital technologies allows an unrestricted re-invention of identity.

Spagnolli and Gamberini address some issues in the current research on human-computer interaction. They focus especially on interaction with virtual environments, where the corporeal movement acquires more relevance than in other mediated environments and needs to be fully monitored. For this reason, data tend to be necessarily 'cross-medial', as the authors say, not only in the sense that they include pictures,

text and sound, but in the sense that they distribute across many sources of data on the same phenomenon. '*Display Techniques and methods for cross-medial data analysis*' describes three solutions to collect and display cross-medial data.

The target theme section of the journal being exhausted, we are left with the other contributions. '*The EMMA Project: Emotions as a Determinant of Presence*' by Alcañiz, Baños, Botella and Rey deals with the challenging topic of emotions; it summarizes a ne borne research project, EMMA, aimed at the manipulation of the emotional presence experienced in a mediated environment. The central idea is to endow the interface with controlled 'mode devices' and deploy them to support certain psychological treatments.

The next couple of contributions belong to the area of ergonomics. Sik Lányi's article, '*Optimization of computer presented information left-handed observer*', compares people with different hand preferences, right-handed versus left-handed. The hypothesis is that such preference be correlated with a better performance in processing information presented in the right versus left portion of a computer screen. The hypothesis is disconfirmed, suggesting that personalization of the information arrangement on the screen according to hand preferences may not be worthwhile. Pretto's paper '*Testing driver's comfort in virtual environments*' shows a possible application of virtual reality to prototype simulation and testing in automotive industry. An evaluation test is described where different features of a car's tool are varied that can influence the drivers' comfort. An immersive virtual setting such as the one described in this paper makes the evaluation more ecological by placing the stimulus into realistic surroundings and allows to test several versions of a prototype with no need to build them physically.

The final contribution, Roy's '*State of the art of virtual reality therapy (VRT) in phobic disorders*', offers another view on virtual reality, in the shape of a brief review of virtual simulations in the treatment of phobias. The guiding principles are sketched and the results reported on the tradeoffs of this clinical strategy vis-a-vis more traditional ones.

We would be happy to receive feedbacks on the papers published.

*The Editors in Chief*