

Editorial Preface

Ben Falchuk, Applied Communication Sciences, Basking Ridge, United States

Adérito Fernandes-Marcos, CIAC / INESC-TEC, Universidade Aberta, Lisbon, Portugal

Art and digital culture is substantiated in the social interaction, from the manifestation of the individual and collective imaginary, through the artefacts, which coexist in a common informational and communicational space supported in the digital media and digital infrastructures. These artefacts represent the greatest expression of our common imaginary within our contemporary era that is also named after the information society. (Marcos, 2017, p.157)

This issue embraces articles exposing some innovative developments in the field of computer arts and creative interface where art and culture artefacts are the central element.

PAPERS IN THIS ISSUE

In *Prazeroza – Interactive Reading Chair*, Rui Gaspar and co-authors propose an artefact (*Prazeroza* from playfulness or *prazer* in Portuguese) to instantiate a peculiar reading environment, an immersive one, created through interactivity. The possible interactions between reader and the artefact are described and analyzed as potential use-scenarios. Then, the artefact itself is exposed in detail, all its components and development paths taken regarding aesthetics, literature, mechanics, electronics and computation, to arrive to the desired immersive reading environment on a constant dialog, interactive and virtual between the reader, the visual languages present in the book, and the machinery and luminosity languages introduced by *Prazeroza*.

Pedro Alves da Veiga in *Alchimia: A Non-Touch Interactive Artwork* presents so-called insights on an experimental artwork using a non-touch interaction interface. *Alchimia* is an interactive installation in which a single viewer/interactor stands in front of a screen and a webcam, and by facial detection and simultaneous processing of pre-prepared images and sounds, a virtual mirror space of constant audio-visual stimuli is created. The artefact aims at questioning the sense of self, a kind of search another identity or our own representation while allowing for self-discovery and playfulness by means of a simple, familiar and almost invisible interface: the webcam.

In *Pixel 2 Installation: an approach to immersion in rematerialized media-art*, Acácio Carvalho and Selma Pereira propose an artefact-installation based on the matrix forms and the small quadrangular shapes that compose them. These forms are the source of the digital image (bitmap) that bring us simultaneously to the pictorial works of Impressionism to Neo-plasticism. The compositions of the panels arise from the pictorial game dynamics with pixels as if they were a binary system. The graphical representation of pixels in *Pixel 2*, the optical and illusion inherent game, are a fundamental part of this rematerialized media-art installation. The installation invites the viewer to interact, in order to extend and expand the perception and experimentation of the different components of the work.

In the last years several approaches have been tried to implement efficient automatic methods for structure-preserving stippling. In *Priority-Based Stippling and Its Stylization Applications* Hua Li and David Mould present a new and efficient approach based on priority-based scheme that treats

extremal pixels first and preferentially assigns positive error to lighter pixels and negative error to darker pixels, emphasizing contrast. The use of a nonlinear spatial function to shrink or exaggerate errors implicitly provides global adjustment of density. Beyond the advantage of good structure preservation, the algorithm provides many variations to extend our stippling to other artistic styles. Authors demonstrate that variations on priority-based scheme by a multiple-stage process can provide flexibility to promote different kinds of interesting features allowing to explore a variety of stylized effects, including heightening, scratchboard, and line drawing, all within the unifying framework of stippling.

We hope this selection of articles can promote useful and playful reading moments helping out in devising new possibilities of current and future development in technology, science and arts.

Ben Falchuk

Adérito Fernandes-Marcos

Editors-in-Chief

IJCICG

REFERENCES

Fernandes-Marcos, A. (2017). Computer artefact: the crucial element in artistic practice in digital art and culture. *Revista Lusófona de Estudos Culturais*, 3(2), 149–166. Retrieved from <http://hdl.handle.net/10400.2/6773>