

Caracolomobile: affect in computer systems

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Abstract This essay presents and reflects upon the construction of a few experimental artworks, among them *Caracolomobile*, that looks for poetic, aesthetic and functional possibilities to bring computer systems to the sensitive universe of human emotions, feelings and expressions. Modern and Contemporary Art have explored such qualities in unfathomable ways and nowadays is turning towards computer systems and their co-related technologies. This universe characterizes and is the focus of these experimental artworks; artworks dealing with entwined subjective and objective qualities, weaving perceptions, sensations and concepts. One of them, *Caracolomobile*, features an art installation creating a set up for an artificial robot that recognizes humans' affective states and answers them with movements and sounds. The robot was installed over an artificial mirror lake in an open indigo-blue space surrounded by mirrors. It perceives and discriminates human emotional states and expressions using an interface developed with a non-intrusive neural headset (The neural headset used was developed by Emotiv

Systems: <http://www.emotiv.com>. Accessed 11 August 2011). This artwork raises questions and looks for answers inquiring about the preliminary steps for the creation of artefacts that would conduct one to poetically experiment with affect, emotion, sensations and feelings in computational systems. Other works in progress ask about the poetic possibilities of mixing computational autonomous processes and behavioural robotic procedures (Arkin 1998) to create artificial environments mixed with humans.

Keywords Contemporary art · Computer art · Affective computing · Behavioural robotics · Neural interface

1 Introduction

Poetic, aesthetic and functional possibilities for robotics are the main foci of the experimental artworks presented in this essay. These possibilities intertwine the sensitive universe of human emotions, feelings and expressions with machines creating a rich experimental set-up. Modern and Contemporary Art have explored similar qualities in unfathomable ways. It goes beyond the scope of this essay to present these achievements. But it is important to raise a few issues related to Brazilian experimental art.

Experimental art has had a strong role in Brazil maybe because the art market did not offer significant possibilities for artists that did not follow the current paradigms. Some of these experimental artists were so radical that they were, during their life, strongly reject by the mainstream Western art. For example, the today incensed artist Lygia Clark¹ was almost expelled from Sorbonne, in France, in the 70s,

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¹ It is a pity that she is dead and can not acknowledge her own success.