web www.leoalmanac.org email info@leoalmanac.org phone +90 216 483 9292 address Sabancı University, Orhanli - Tuzla, 34956 Istanbul, Turkey

LEONARDO ABSTRACT SERVICES (LABS) 2008-2009 SYNTHETICS: AN ARCHAEOLOGY OF THE ELECTRONIC IMAGE IN AUSTRALIA, 1955-1975

By Stephen Jones

This thesis primarily traces the development and use of electronic technologies in Australian visual art, and to a lesser extent dance and electronic music. The thesis examines the cultural and technological layers of the arts in Australia, building up an understanding of the local context within which much of the artistic developments took place. Art and Technology is a collaborative practice and a systems theoretic framework is utilized in examining the workings of the collaborations between artists and technologists by which technological artworks are produced. A distillation of the cases described provides a means for understanding the spectrum of ways in which collaborations function and gives some insight into guidelines as to how collaboration can be made to work smoothly and with maximum value for everybody involved. The thesis begins with the seeds of computer graphics in the late 1950s and early 1960s, broadening into the earliest computer art based on developments at the University of Sydney. I then cover developments, in the 1960s, of kinetic art that used electronics as a means of working with light and which formed the first steps into the development of responsive artworks through the work of Frank Hinder, Stan Ostoja-Kotkowski and Asher Bilu. Following this I explore the impact of geometric abstraction, post-object art and conceptualism on art and technology through the artists gathered around the Tin Sheds, including Optronic Kinetics. The work of the dancer Philippa Cullen, also associated with the Tin Sheds, led to the beginnings of interactive performance through the work of and her work with theremins. Meanwhile in the late 1960s the underground films and lightshows of Ubu Films, in the context of the psychedelic era, led to the slightly later development of video synthesis with video artists such as Mick Glasheen of Bush Video in Sydney and John Hansen, working in Melbourne. I close with the exhibition 'Computers and Electronics in the Arts' which was held as part of the Australia 75 Festival of the Creative Arts and Sciences and forms a point of convergence for almost all the work discussed.

• web www.leoalmanac.org email info@leoalmanac.org phone +90 216 483 9292 address Sabancı University, Orhanli - Tuzla, 34956 Istanbul, Turkey

Degree: Ph.D. Year: 2006 Pages: 455 University: University of Technology, Sydney (UTS) Supervisor: Helen Grace Language: English Dept: Art History / Cultural Theory Copyright: Stephen Jones Lang_author: English Email: <u>s_jones1@bigpond.com</u> Keywords: Art & Technology, electronic art, systems theory, video art,

kinetic art, conceptual art, computer art, digital art, interaction, collaboration

LEONARDO LABS

Leonardo LABS is annually peer reviewed by an international panel of reviewers. This year the panel selected the following abstracts to be published on Leonardo Electronic Almamac (LEA) in order to bring attention to the outstanding work of these authors by the international community interested in the intersection of art, science and technology.

The Peer Review Panel for 2009-2011 are: Yiannis Colakides, CoDirector, New Media (NeMe), Limassol, Cyprus, Christo Doherty, Chair, Digital Arts, University of the Witwatersrand, Johannesburg, South Africa, Ryszard W. Kluszczynski, PhD., Chair, Department of Media and Audiovisual Culture, University of Lodz, Poland, Tom Lesser, Director, Center for Integrated Media, California Institution of the Arts, Valencia, California, United States, Rachel Mayeri, Assistant Professor of Media Studies, Harvey Mudd College, Claremont, California, United States, Andrea Polli, Director, Interdisciplinary Film and Digital Media (IFDM) and Mesa Del Sol Chair of Digital Media, University of New Mexico, Albuquerque, New Mexico, United States, Sheila Pinkel, Professor of Art, Pomona College, Claremont, California, United States.