

PUBLIC LIFE AND PERVASIVE SYSTEMS: A CRITICAL PRACTICE

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Master of Philosophy . 2006

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PUBLIC LIFE AND PERVASIVE SYSTEMS: A CRITICAL PRACTICE

by

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A research submitted to the University of Plymouth
in partial fulfilment for the degree of

Master of Philosophy

Institute of Digital Art and Technology
School of Computing, Communications and Electronics
University of Plymouth
Plymouth UK

January 2006

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ABSTRACT

The dissertation **Public Life and Pervasive Systems: A Critical Practice** is part of the research conducted both in the UK and Brazil, between the years 2001 and 2005, in a context permeated by issues related to the introduction of intrusive technologies and practices in the field of communication.

The research involved the production by the author of three pieces of artwork: an interactive installation called *4walls*, the web-based work *meta4walls* and the *Spio* project, defined as a de-generative installation. Each project deals with distinctive technologies and establishes dialogues with specific cultural and geopolitical contexts. The projects simultaneously point to a common ground of alienating factors found in contemporary societies, affected by the production of semiotic power in late capitalism. More to the point, pervasive technologies are detected behind the shifting boundaries between the private and public spheres, where new dichotomies are generated, such as intimacy and privacy, *mixophobia* and *mixophilia*, representation and mediation, 'forged reality' and social reality.

The research considers interfaces as the key tool in the analysis of such dualities in the domain of art. Among the many mediation possibilities promoted by pervasive systems and communication technologies, the creation of strategies based on non-corporative networking and social interfaces that encourage individuals to re-enact participation in the construction of public-life is seen as a challenging responsibility for artists committed to social reality. This research appoints 'reality-based interfaces' as an idea that considers interface to be opposed to an obstructing device; one that allows perspectives of flow and exchange between domains beyond the merely technical approach.

Some key artworks by distinct artists are discussed under this concept, taking into consideration their conceptual and technological proximities to my projects. Thus, the dissertation attempts to probe the extent to which the art work produced in the course of this research can match the idea of reality-based interface and, as such, function as a tool for empowering individuals, produce awareness with regards to intrusive procedures and, perhaps, work to perforate the 'bubble' that prevents one to better grasp the world 'outside' of pervasive technologies.

key words: *intrusive technologies, intimacy, privacy, social-reality, reality-based interfaces, reappropriation, recontextualization, pervasive systems, alienation, embodied networks.*

ACKNOWLEDGMENTS

I wish to acknowledge the following people for assisting the research process, always

with encouraging words and supportive suggestions:

Mike Phillips [1st supervisor]

Joasia Krysa [2nd supervisor]

Daniela de Castro e Silva

Gavin Adams

very special acknowledgements

without your help this research would not be possible:

Ana Amorim

Carole Watson

Cristiane Mesquita

Christine Mello

Gley Fabiano Cardoso Xavier

acknowledgements

thank you all for being patient and listening some ideas

Armin Medosch

Claudia Giannetti

Ricardo Rosas

Bruno Verner

Eliete Mejorado

thanks for sharing your inspired writings

Brian Holmes

Suely Rolnik

with the kind support of

Senac – Centro Universitário Senac

Senac – Post Graduation Studies CISME

for facilitating the conclusion of this research

dedicated to:

Cristiane Mesquita

*for your love along so many years, for encouraging to keep the research on at all times,
for being so patient during the whole writing process*

Livia Mesquita Bambozzi da Silveira

for your sweetness

São Paulo, January 2006

AUTHOR'S DECLARATION

At no time during the registration for the degree of Master of Philosophy has the author been registered for any other University award without prior agreement of the Graduate Committee.

This study was partially financed with the aid of the Virtuose Fellowship from Ministry of Culture, Government of Brazil.

Three artwork projects were developed as part of this research process. They are called: *4walls*, *meta4walls* and *Spio*. All the projects were publicly presented in different exhibitions in Brazil and Europe, which contributed to the development and contextualization of this research.

Relevant seminars, conferences and new media festivals were regularly attended at which work was often presented; external institutions were visited for consultation purposes and several papers prepared for publication.

Presentations of the works in formal exhibitions:

4walls

Intimidade Exhibition - Paço das Artes, São Paulo, Brazil 2003

Piemonte Share Festival – Turin, Italy 2005,

Videofomes . XX Manifestation Internationale d'art vidéo et nouveaux média - Clermont Ferrant, France 2005

meta4walls

Videobrasil International Electronic Art Festival - São Paulo, Brazil 2001

25th São Paulo International Biennial - São Paulo, Brazil 2002

Videofomes . XIX Manifestation Internationale d'art vidéo et nouveaux médias - Clermont Ferrand, France 2004

VAE8 – Realidad Visual/Galeria CCPUCP – Peru, Lima 2004

Cyphorg Citizens and Unwitting Avatars - New Langton Arts, Berkeley, USA 2005

Spio

Emoção Art.Ficial 2.0 - Itaú Cultural, São Paulo, Brazil 2004

HTTP House of Technologically Termed Praxis - London, UK 2005

Presentation and Conferences Attended:

Consciousness Reframed 2000 - University of Wales College, Newport, UK 2000

10th International Symposium on Electronic Art – ISEA Paris, France 2000

Intimate Technologies/Dangerous Zones – New Media Institute, Banff, Canada 2002

FILE Symposium 2002 - São Paulo, Brazil 2002

Emoção Art.Ficial 1.0 – Itaú Cultural, São Paulo, Brazil 2002

Redes Sensoriais - Fortaleza, Brazil 2003

Emoção Art.Ficial 2.0 Technological Divergences - Itaú Cultural, São Paulo, Brazil 2004

FILE Symposium 2005 - São Paulo, Brazil 2005

Word count of main body of thesis: 22.625 words

Signed

January 29, 2006

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INTRODUCTION

pre-text: a short story

Between 2000 and 2002 I had the opportunity of living in the UK as an artist in residence at the University of Plymouth, on a research program conducted by the CAiiA-Star Centre (currently operating as 'Planetary Collegium'). My initial proposal was an attempt to bring together two different issues related to new media: interface as a sensorial and immersive experience and the public/private use of shared urban spaces. The matter was closely linked to my previous works, as well as to the environment I had found in the UK with regards to the socio-political and technological issues surrounding surveillance systems. Such confluences encouraged me to start this research.

The context that permeated the studies was marked by political discussions around the implementation of new laws in England, more notably since the so called Rip Bill¹ in the year 2000, which would lead to violation of civil liberties and grant government authorities with unlimited surveillance rights. My proposal crystallized as a practical and theoretical exercise where I was able to put in evidence some of the issues raised by a context of restricted freedom – which was seriously intensified after the September 11 attacks in the US in 2001.

The notions of privacy I experienced while living in UK were set in sharp contrast with what was considered an intrusive system or a privacy invasion in countries such as Brazil, where I had returned to in 2002. Biometric procedures, reconnaissance techniques, facial recognition software, the Echelon and controlled networks, are not part of everyday life in Brazil (yet). However, the emergence of such technologies raises a set of issues with regards to recent developments in world politics around security, which involve

¹ The Regulation of Investigatory Powers Bill was passed on October 2000 after some controversy and little debate. Like it happened in other countries, newly implemented laws allowed new surveillance methods. The Bill required the UK Internet Service Providers to install controlling systems so as to allow the Government and its authorities to track subscriber's communications traffic, among other implementation. A comprehensive guide to the issues on the Rip bill can be found on Stand's website: <http://www.stand.org.uk/commentary.php3>

international policies that affected many localities such as Brazil, socially, economically and politically.

During the research period, I produced three projects connected to this context in different ways. They are: **4walls** (2000-2003),² an interactive installation dealing with privacy invasion issues; **meta4walls** (2001)³, a web project based on cookies and data-collection and **Spio** (2004)⁴, a 'de-generative' installation that mobilizes concepts borrowed from robotic and generative systems.

Each one of these pieces deals with specific aspects of intrusive systems, pointing to an archetypical condition regarding pervasive systems, as an attempt to produce straight connections between art, public spaces and social reality.

The projects are immersed into critical issues of privacy and intimacy that have been brought into focus through the implementation of recent communication technologies. These technologies have enabled the proliferation of peer to peer networks, wireless gadgets, online games, mobile technologies, GPS and PDA's that appear to be empowering new levels of intimacy, whilst simultaneously threatening individual privacy and influencing the way people experience social reality.

Under the auspices of the promise for 'solutions for a smaller world' (IBM) and 'connecting people' (Nokia), communication technologies corporations have been linking the idea of intimacy in private spaces to the notion of easy, interchangeable and shareable 'realities'.

² *4walls* installation was first exhibited at the Intimidade exhibition held by Paço das Artes in São Paulo, Brazil (2002). Subsequent exhibitions took place at Piemonte Share Festival in Turin, Italy (2005) and at XX Videoformes in Clermont Ferrant, France (2005). Further information including technical resources are provided in the appendices.

³ *meta4walls* project <<http://www.comum.com/diphusa/meta>> was developed with the support of the 13rd Videobrasil International Electronic Art Festival (São Paulo) in which it was firstly exhibited.

⁴ *Spio* project was commissioned by Itaú Cultural for Emoção Art.Ficial 2.0 (2004) an international exhibition on art and technology organized by Itaú Cultural, São Paulo. The exhibition was curated by Arlindo Machado and Gilberto Prado who have underlined political aspects in new media art practices. *Spio*'s last exhibition took place at HTTP House of Technologically Termed Praxis <www.http.uk.net>, London, UK in 2005.

Altogether, intimacy, privacy and reality have been reshaped as mere discourses: they have been commodified by the market as aesthetic values attached to technological products, and locked into a logic of technological interface as the only possible way for proximity and real time communication.

In large cities such as São Paulo, a significant number of its inhabitants live in sealed environments, protecting themselves from public spaces, street-level activities, or, a term commonly used in Portuguese, 'raw realities'. Networking activities are seen to be a solution for working and living in such a time consuming space as well as a model for sharing experiences in a supposedly protected public space – in comparison to the real city. Conversely, networks may also function as an alienation factor regarding an effective participation in actual public life.

This dissertation probes the extent to which artworks (networked or not) can function as meaningful mechanisms for reconnecting individuals with tangible realities, if possible, beyond representational artifices. This question points toward the creation of 'tools' for minimal mediation, or 'reality-based interfaces' as a definition for devices that will not only encourage individuals to participate in the shaping of public spaces, but may also suggest awareness regarding social reality. Artworks evolving out of this context would have to deal with this challenge, as it relates not only to new aesthetic preoccupations, but also to the socio-political issues pervading today's information society.

According to David Lyon 'information societies are surveillance societies', (2001: 10) which is a statement that foresees controlling mechanisms in daily life by means of the information flow on the wake of the standardization of pervasive technologies. In a world where potentially everyone is connected and easily reachable, there is also the risk of being over-watched or effectively surveilled – which is acknowledged here not as an intrusion into one's intimate sphere, but, as Felix Stalder suggests, as 'an issue of privacy

as a structural problem of political power' (2002b: 123). Having surveillance procedures as a common background, the artworks discussed here suggest divergent applications of pervasive systems, by means of its interfaces with 'reality'.

Instead of separating barriers, interfaces are here considered as joining systems, as shared borders allowing the flow of information between domains beyond a merely technical notion.

This thesis attempts to examine the possibilities of an art connected to life (social reality) dealing critically with the idea of social interfaces which can be understood as an important tool in the unveiling of the political implications of the dichotomy private versus public.

Altogether, the theoretical assumptions associated to the practical projects inform the conceptual and technological elements involved in my artwork. The projects can be seen as responses to specific contexts, raised by the necessity of dialogue with different 'realities'.