

# 2001

# **EMOTIONAL ARCHITECTURES / COGNITIVE ARMATURES: COGNITIVE SCIENCE IN INTERACTIVE DESIGN**

September 20<sup>th</sup> to 22<sup>nd</sup>, 2001

The research initiative is made possible through the support of: This event is made possible through the support of the following:

# **Sponsors:**







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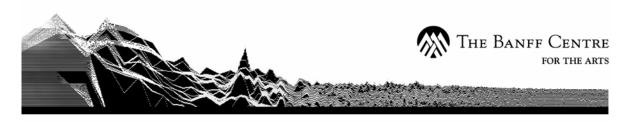
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### **Partners:**

AMPIA, ASERC, IMAT, SMART Labs, and UCDarnet



# 2001 (DUD) (DUD)

**Emotional Architectures** continues research collaborations and discussions that have emerged through Emotional Computing and Living Architectures, two summits in 2000 that were a part of The Banff New Media Institute and Growing Things, and Out of the Box (1999). In this instance, "emotion" infers both the architecture of the brain and the psyche, the ways that cognitive processes and psychological states are evoked and constructed by the emotional architectures that we design.

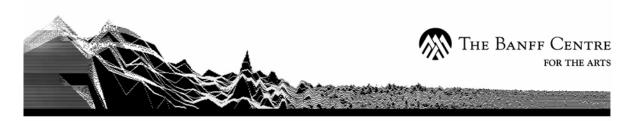
This is an opportunity for computer scientists, architects, designers, psychologists and artists to explore the relationships between physical and virtual design. This event brings cognitive science into the mix of research in advanced visualization, collaborative virtual environments, and technology design. How do we design experiences that bridge virtual and physical spaces, and take into account the body, emotions, the limits of physical and virtual materials? When does the body itself become a material, or act as a map? How can we imagine beyond three dimensions, into mathematical topologies? What new tools are there that we can use to imagine virtual designs? What is the architecture of a wireless world? This event considers smart dwellings for living, work and play.

# Themes and Goals:

What is the computing challenges in creating large-scale virtual environments that translate data from scientific, social and other sources into meaningful representations for human translation? How can the spatial knowledge that architecture brings be brought into these spaces and their designs? How does presence translate into networked environments?

What are "emotional architectures"? Spaces and our relationships to these, both real and virtual, are filled with cultural and ideological assumptions about feeling. Why do some spaces evoke certain feelings? How does power flow within spaces? The tragic events of the last week underscore issues of power, space, and the symbolic. As designers, what are the emotional values that we carry into spaces, virtual and real?

We will consider models for virtual housings, including non-Western dwelling spaces, contingent architectures and nomadic structures. This year incorporates design initiatives from Central and Latin America, indigenous architectures and spaces. What is ecology of virtual and computer technologies that is compatible with ecology of physical spaces and dwellings? What is the relationship between immersive design and interaction in these spaces? How can wireless technologies assist in the design process? How can these processes of design include the cultures, feelings, psychic constructions of indigenous communities.



# 2001

denda

We will consider the computing and engineering challenges of display within virtual environments. Display is a design and computing challenge as well as presentation, especially when virtual spaces are often procedural and process driven. How do we represent process? What is needed to develop multimodal experiences that use sound, visuals, tactility, and build in amplified and expressive processes? Display is directly linked to the visceral, the spectacular, the engaging, as well as the intuitive and the logical.

What are the relationships between emotion, spatiality, play and animation? This question is of particular relevance to the games community.

We will consider advanced networks as a place to develop, test and contain forms of architecture and dwelling, compatible with our physiological abilities as humans, across a number of cultures.

In sum, we will consider the debates about cognitive science, emotion, human and computing space.

# **AGENDA**

What are the key concepts of Emotional Architecture? Building on Living Architecture and Human Generosity Project, a review of key issues, projects. 2001 – physical spaces, emotion, intelligence, ubiquity, virtual spaces, personal and collective identities and other relevant questions.

# WEDNESDAY, SEPTEMBER 19, 2001

8:30 pm Meet and Greet

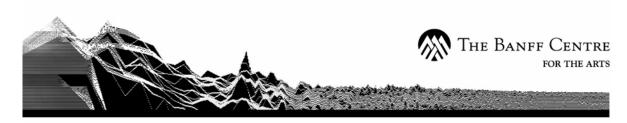
There will be opportunity to introduce yourself and your goals for the

three day event

Location: Cozy Nook, Sally Borden Building

Cash bar

**Emotional Architectures** 



# BANFF NEW MEDIA INSTITUTE

# 2001

# THURSDAY, SEPTEMBER 20, 2001

# 8:00 am - 9:00 am - Technical Run Through - all presenters for the day must attend

Location: Rice Studio (Jeanne & Peter Lougheed building)

## 9:00 am - 10:00 am

# Welcome and introductions:

Sara Diamond Executive Producer, TV & New Media, MVA, The Banff

Centre, www.banffcentre.ca/mva

Introduction and What People Want from the session

1 minute on who they are and expectations

Sara Diamond overview

Sara will moderate most sessions

# 10:00 am - 12:00 pm

# How Do We Understand Cognition, Space and Place, Memory: The Narratives of The Virtual and Real?

Brian Fisher Media and Graphics Interdisciplinary Centre, University

of British Columbia (technology as dynamic artifact and communication medium) http://www.cs.ubc.ca/~fisher

Marisa Olson Cultural Theorist, Artist, Writer & Independent Curator

# 12:00 pm - 1:00 pm

Lunch

### 1:00 pm - 2:45 pm

### Responsive Environments – Spaces, Materials, Objects and Buildings

Anthony Kiendl Curator, Dunlop Art Gallery, www.dunlopartgallery.org

Derek Hales Digital Architecture Research, School of Design

Technology, U. of Huddersfield, www.hud.ac.uk

Antti Väätänen Research Scientist, VTT Information

Technologies, Human Interaction Technologies,

Finland, http://www.vtt.fi/tte/

Bill Seaman Design | Media Arts, UCLA (Multi-Modal Experience.

> Intelligence, Bodies and Texts) www.cda.ucla.edu/faculty/seaman/

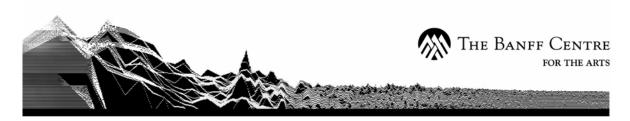
# 3:30 pm - 4:45 pm

### Play! Perform! Games Space, Cognition, Engagement: The Body and the Story

John Buchanan Research Scientist, Electronic Arts; Faculty, University

of Alberta, http://www.cs.ualberta.ca/~juancho/





• Craig McPherson and Martin Courchesne

Radical Entertainment, Canada (Character, Space,

Procedural Animation)

Brian Wyvill Department of Computer Science, University of Calgary

www.cpsc.ucalgary.ca/~blob/index.html

5:00 pm - 7:00 pm Nature Walk - Tunnel Mountain Meet in Front of La Palette

Please wear comfortable shoes and bring a bottle of water.

7:00 pm - 8:30 pm

Dinner

8:30 pm

**Optional Discussion:** 

Architectures of Power, Architectures of Violence, Architectures of War, Architectures of Peace

As an international group, air travel permitting, it feels critical to create a time on our agenda for those of us who wish to, to meet and discuss the implications of the events of last week on our understandings of global virtual and physical architectures. While I expect that there will be references throughout the three days to the current crisis, I wanted to set aside this time for us to emerge issues that relate directly to emotional architecture, virtual and real. This is an optional discussion because there are some of you who have escaped from NYC to join us, and need respite, or for other reasons, do not want to participate in this discussion at this time.

# FRIDAY, SEPTEMBER 21, 2001

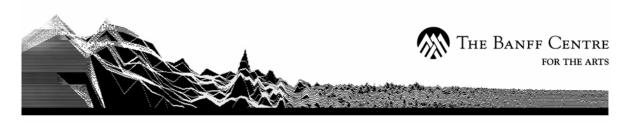
# 8:00 am - 9:00 am - Technical Run Through - all presenters for the day must attend

Location: Rice Studio (Jeanne & Peter Lougheed building)

9:00 am - 9:30 am

Welcome and introduction:

Welcome back! Summary/brain spill from Sara Diamond of some of key points of the day before



# 2001

### 9:30 am - 11:15 am

# Designing Appropriate Architectures / Designing for Context / Integrating Users

Franklin Hernandez Castro Desino y Constuccion, Lincos (Little

Intelligent

Communities and tropical architectures), Costa Rica

Barbara Mones-Hattal University of Washington, Computer Science &

Engineering (Libraries),

www.cs.washington.edu/homes/mones

**Austin Parsons** Visiting Assistant Professor, Building Technology,

Massachusetts Institute of Technology

# 11:30 am - 1:00 pm

# **Enacting Human Memory, Intimacy, the Body and Cognition**

Ted Krueger Rensselaer Polytechnic Institute (Autonomous

Architectures, Architectures of Time and Space, Zero

G)

Media Artist/Curator/Writer (Projects, Architectures of Nina Czegledy

Dreams and the Body)

Igor Stromajer Intima | Virtual Base, Slovenia, www.intima.org Assistant Professor of Time and Interactivity, Lynn Lukkas

Director of Graduate Studies, Department of Art,

University of Minnesota

# 1:00 pm - 2:00 pm

Lunch

# 2:00 pm - 3:30 pm

# Translations: Space, 3D and Beyond

Jov Mountford Design Manager, IdlBias

Denis Gadbois Director Future Media Lab (3D Scanner Technology),

University of Calgary, www.ucalgary.ca/~dgadbois

Pierre Boulanger Department of Computing Science, University of

Alberta

### 3:45 pm - 6:30 pm

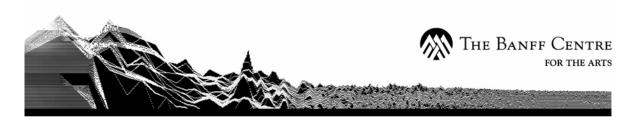
### Nature Walk - Hoodoos

# **Meet in Front of La Palette**

Please wear comfortable shoes and bring a bottle of water. This is a moderate walk. The trail has gentle slopes that go up and down the river valley.

# 6:30 pm - 8:00 pm

Dinner



# 8:30 pm - 10:30 pm

# The Architecture of Communications: Playing With Tools and Environments: Hands on Show and Tell

• Stefan Kueppers Researcher, Virtual Reality Centre, University

College London (show & tell of various projects,

hands on), www.vr.ucl.ac.uk

• CodeZebra www.codezebra.net/

• Sheelagh Carpendale Department of Computer Science, University of Calgary

John Tonkin Artist, Australia

• Warren Sack School of Information Management and Systems,

University of California, Berkeley

• Sara Diamond Executive Producer, TV & New Media, The Banff

Centre

Others are welcome to join us for show and tell, let us know

# SATURDAY, SEPTEMBER 22, 2001

# 8:00 am - 9:00 am - Technical Run Through - all presenters for the day must attend

Location: Rice Studio (Jeanne & Peter Lougheed building)

# 9:00 am - 9:30 am

# Welcome and introduction:

Welcome back! Summary/brain spill from Sara Diamond of some of key points of the day before

### 9:30 am - 11:30 am

# Computers, Humans, Data Intelligence and Spaces

Warren Sack
School of Information Management and Systems,

U. California, Berkeley, www.sims.berkeley.edu/~sack

Sonya Allin Human Computer Interaction Institute, Carnegie

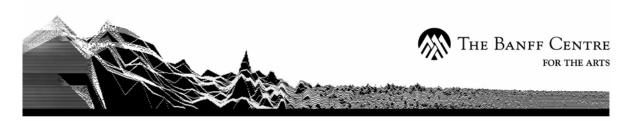
Mellon

Scott Paterson Technical Producer, Plumb Design Inc.

http://www.plumbdesign.com

• Saul Greenberg Department of Computer Science, University of Calgary

www.cpsc.ucalgary.ca/grouplab/



2001 11:45 am – 1:15 pm

Presentation Spaces, Process Spaces – Design, Virtual and Public Spaces,

Visualization

• Sheelagh Carpendale Department of Computer Science, University of Calgary

(Advanced Visualization & Presentation Space)

http://www.cpsc.ucalgary.ca/~sheelagh

• Vincent John Vincent Vivid Group Inc., (Presentation Spaces-Design &

Virtual

Environments or Responsive Environments)

www.vividgroup.com

Richard Levy
Faculty of Environmental Design, University of Calgary

http://www.ucalgary.ca/~rmlevy

1:15 pm – 2:15 pm

Lunch

2:15 pm – 4:00 pm Impossible Spaces, Imaginary Architectures

Greg Niemeyer
Assistant Professor, UC Berkeley, Departments of Art

Practice and Rhetoric (Reality Engines)

• Franz Fischnaller School of Art and Design, Electronic Visualization

Laboratory, University of Illinois, Chicago

www.evl.uic.edu

Bill Seaman
Design | Media Arts, UCLA, www.design.ucla.edu/

Mr. Snow
Designer/Artist, House of Laudanum,

http://laudanum.net

4:00 pm - 5:30 pm

Debriefing and Research Questions

5:30 pm - 6:30 pm

Final reception

# SUNDAY, SEPTEMBER 24, 2001

9:30 am - 1:00 pm

Research retreat to follow up on project development and themes Location: JPL 204 (Jeanne & Peter Lougheed building)

1:00 pm - 2:00 pm

Lunch