"The Network Metaphor and the New Renaissance"
A Research Network for Researching the Network

This curriculum aims to build an international approach to studying the network as an idea, as an artistic space, as a common territory between art and science and as a symbolic representation of the transformation inherent in a new renaissance.

Research Context
The network is an integral part of our daily lives which has an importance going beyond its communication potential and now calls for an examination of its place in our lives, not just as a way of exchanging, but as an organisational approach to how we understand reality.

Over the last several decades we have come to understand network structure, interactivity and cybernetics, as a schema that describes the way many processes function. According to the neurologist Joseph Ledoux, the brain is a network of synapses which defines our person. Norbert Weiner, the father of cybernetics, proclaimed the "the role of information and the technique of measuring and transmitting information constitute a whole discipline for the engineer, for the physiologist, for the psychologist and for the sociologist."[1] In all areas of life we find network structure at the heart of any operation. It is the way we are starting to understand reality, and with a different geometry than the Euclidean geometry inherited from the first Renaissance. The network, ever present in our daily lives, is more than a simple means of communication. It is the way we understand how things work, the interactive process through which we will eventually imagine the world and our relation to it.

This project can be seen as the beginning of a multi-faceted examination of the network as a creative tool, as a sociological phenomenon, as an idea and as a paradigm for future social organisation.

> *"The interactive network is the new metaphor of our civilisation*
> *and*
> *its geometry the geometry of our imagination,*
> *– the paradigm of the new renaissance."*[2]

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[1] N. Weiner (1965) *Cybernetics, or Control and Communication in the Animal and the* Machine, Cambridge MA: MIT Press, p. vii.

[2] D. Foresta (2005) "The Network Metaphor", Les Carnets de la Société d'Historie et de Théorie du Design, No. 4, p. 43

The Network as: a tool, an idea, a paradigm

"The serious artist is the only person able to encounter technology with impunity, just because he is an expert aware of the changes in sense perception." Marshall McLuhan

Workshop

This seminar given by Don Foresta will present the network as an artistic tool, an idea and the paradigm of a new renaissance.

The new givens in both art and science eventually propose new ways of representing reality and a schematic model of how it works. The flux of civilisation produces the ideas that produce the tools for the realisation of the ideas. In the use of those tools - in this case, the network - we can see the organisational patterns that are becoming the institutional expression of our future society.

Theory of Communication Space & the Media,
Our communication space is that collective space made up of all the means of communication we have at our disposal. It is where society sees and "understands" itself, where each new generation learns its values – how to deal and interact with other human beings. The role of art and the media in communication space

MARCEL & Art,
Why do we make art and how does that role change with evolving technology. MARCEL is a case study, a permanent high band-width interactive network dedicated to artistic, educational and cultural experimentation, exchange between art and science and collaboration between art and industry, www.mmmarcel.org. Changes in artistic practice

Network Geometry from Euclidean to Fractal,
The network space functions in time not as a fixed static space but one whose evolution is part of its definition. The space-time geometry of this space will

eventually replace the Euclidean geometry of the first renaissance as our way of visualising the world. The geometry of interactivity

Changes in Representation,
A transformation in society is a renaissance when the rupture with the past in how we understand and represent reality is sufficiently profound. The renewal resulting from it comes through proposing new definitions and models of reality and ways in which we relate to them. Changes in perception

Network as an Organisational Schema,
For over a century art and science have been defining a new space for western society which contains the network based organisational schema of our reality, replacing the clock-work mechanism of the classical universe. This space has been proposed by artists, defined by science and made habitable by artists again as it is integrated into our cultural consciousness. Interactivity defined

Interface Between Art & Science.
Many art and science projects have been proposed over the years which have been based on a misunderstanding of the role of each and have been more involved with the relation between art and technology. Is there a real interface between them and how to we approach it? The two halves of the brain

During the course of the seminar, it would be pertinent to set up a multicasting platform to begin communicating with other members of MARCEL and to confront the reality of the very high bandwidth network directly. Experimenting with the available tools and examining the eventual development of new tools would be an integral part of the exchange. An online dialogue with members of MARCEL working in those fields could be part of the sessions.

Further Themes

> *"Meaning - objective reality - is the joint product of those who communicate."* John Wheeler, Physicist

The following themes are proposed to provide a multifaceted examination of the network as a point of departure for an on-going examination of a fundamentally important structural change in our society.

Network as an Artistic Tool
Theory of Communication Space
Perception & Interpretation
Technological Evolution
Art & Technology
History of Interactive Art
Art & Media
Art & the Network
Artist as Toolmaker
Artist as Researcher
MARCEL

Network as an Idea
Scientific Paradigm - cybernetics
Artistic Paradigm - Interactivity
Network Geometry from
      Euclidean, to
      Spherical, to
      Fractal
As an Organisational Schema
As a Philosophical Idea
As a Social Manifestation

Meaning of Renaissance
New Definitions of Reality
Changes in Representation
History of Toolmaking
Role of Art
Scientific Propositions
Cultural Models
Social Transformations
Fundamental Debate -Ethics
Comparative History

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