

Subtle Technologies Conference Schedule
May 17th-20th, 2001

SUBTLE BROADCAST:
MAY 17th 2001, 8pm -10pm
Innis Town Hall, University of Toronto Campus
2 Sussex Ave. (@St. George & Harbord St.)

Programme I: Screening

Hierarchy by Christine Gorbach and Gary Lee Nelson, 12:00, 2000, USA

This is the first collaboration between painter/video artist Christine Gorbach and composer Gary Lee Nelson. The title and impetus for this piece come from Gorbach's "Hierarchy," a matrix of sixteen small paintings selected and cut from a much larger canvas. Both artists have been concerned with layers of structure, ambiguities of meaning and the joy of chance. Now they meet in a new exploration of the relationships between sound and image.

Perpetuum Mobile by Michael Bielicky, 4:00, 1990, Czech Republic

Perpetuum Mobile II is Prague artist Michael Bielicky's exploration of continual motion, representing the manifestation of permanent movement as an elemental condition of nature and human beings.

Extendris by Esther Valiquette, 10:10, 1993, Canada

Constructed as a contemporary psalm, this experimental video reflects on the origins of life and the vast archival content of DNA. Extendris revolves around the ideas of Richard Dawkins (*The Blind Watchmaker*, 1987), according to whom, human beings, as well as all living organisms, are the temporary receptacles of the DNA code. We serve the DNA and not the reverse. Esther Valiquette died of AIDS in 1994 and is well remembered for her contributions to the Canadian film and video arts community.

Off and On by Michael Gitlin, 7:30, 1998, Canada

Documenting a double performance, the close up activity of hands painting and long action shot of a figure entering, dressing and leaving a space, *Off and On* addresses itself to issues of scale, figure and ground, surface and depth. Through its digital intervention in the two actions, playing forward and in reverse, video artist Michael Gitlin is able to investigate the emotional resonance of order, duration and repetition.

A-Light by Yan Breuleux & Alain Thibault, 4:30, 1997, Canada

Multi-media artist Yan Breuleux's and electronic music composer Alain Thibault's *A-Light* is a video/music project that explores experimental light and electronic sound effects in an extreme impact context. The function of the video is to project an image that is at the same time a form of movement and a form of light. The rhythm and the musical forms are the guidelines and parameters of time, from the micro to the macro structure.

Aquaeolian Whirlpool by Gordon Monahan, 5:00, 1990, Canada/Germany

Aquaeolian Whirlpool is a video documenting multi-media artist Gordon Monahan's installation of the same name. A ten-foot high vortex of water is pumped around one hundred-foot long piano wire that rises vertically to a suspended soundboard and amplifying system. The swirling vortex, which looks like a tornado, generates intense aquaeolian tones in the piano wires. This piece demonstrates that liquid can substitute for air as a medium for the generation and transmission of musical sound.

Remotely in Touch by Laiwan, 13:30, 1998, Canada

Starting with a re-investigation of the five elements: earth, fire, water, air and love, *Remotely in Touch* explores how digital, visual and informational processes alter the way we perceive the world, the way we perceive ourselves, and the act of perception in general. Laiwan is a Vancouver based artist and writer recognized for her interdisciplinary practice based in poetics and philosophy.

Personal Human by Tom Sherman, 4:30, 1999, Canada

Personal Human, by artist and theorist Tom Sherman, is a video contextualization of the lead track from Sherman's "Personal Human" audio CD. Set to this musical collaboration between Sherman and Montreal based composer Jean Piche, *Personal Human* portrays a person who aspires to be a machine - one who finds it confusing to contemplate his animal nature.

Womb, Germ and Ra by Tasman Richardson, Canada

Womb 1:37, 1999, Germ 2:15, 1999, Ra 00:24, 1999

Canadian artist Tasman Richardson presents three short videos. Womb: dense red space gradually unveiling cell dividing, the expression of horror, digital conception accompanied by a piercing shrieking tone. Germ: illustrating the microcosm in a macrocosmic way. Permutations into dense space layer upon layer. Ra: infatuation with solar might, showing the Japanese flag reanimated by the spectacle of the sun as viewed by inhuman eyes. The sun displayed in detail that the human eye cannot hope to look in on.

Réaction 26 by Charles Binamé, 4:00, 1971, Canada

Using electronic feedback, recognized film and video artist Charles Binamé's Réaction 26 is a crazy roller-coaster ride of images circling, bypassing and being super-imposed upon one another as they dance about the screen. Fascinating to the eye, the images resemble abstract geometric forms. Bursting and streaming images on the screen are supported with an extremely emotive soundtrack made by Michel Hinton.

Programme II: Artist Presentations, Moderated Discussion & Performance

The Appearance Machine by Willy Le Maitre and Eric Rosenzweig

Willy Le Maitre's and Eric Rosenzweig's The Appearance Machine physically transforms detritus into a live audio/video stream which is unicast directly to the festival or gallery viewer from its permanent location in New York City. An industrial entertainment complex for the continual transformation of the input of locally generated refuse to output as global media, it is an autonomous synaesthetic system that perpetually constructs a cinematic aural/visual space.

Inside the Mask by Andrea Polli

Andrea Polli is a digital media installation and performance artist living in Chicago, Illinois; She is currently Assistant Professor of Computing at Columbia College Chicago and an adjunct faculty member of the School of the Art Institute of Chicago. Polli has presented her performance work with eye and motion tracking devices in France, Brazil, the UK, and throughout the US. To support this work and the production of an Audio CD, Active Vision, she has performed artists' residencies at Rensselaer Polytechnic, Harvestworks, Franklin Furnace, and The University of California at San Diego.

FRIDAY PROGRAM MAY 18TH 2001 8-10PM

Innis Town Hall

8PM - Gary Lee Nelson/USA

In his presentation Sonomorphs: An Application of Genetic Algorithms To the Growth and Development of Musical Organisms, composer and performer Gary Lee Nelson will outline the fundamental techniques for genetic algorithms and discuss their application to musical composition. Mr. Nelson will demonstrate his musical methods using an interactive computer program along with graphic and sonic illustrations.

Gary Lee Nelson is chair of Technology in Music and Related Arts at Oberlin College. He has appeared as composer, performer and teacher throughout North America, Europe, Asia and Australia. He has received grants from the Shansi Foundation, the Sloane Foundation, Ohio Arts Council and the National Science Foundation for his research in algorithmic composition. He is a pioneer in the use of mathematical models for creating musical structure. His recent work has centered on techniques for interactive composition and improvisation with computers, sound synthesizers and video.

9PM - Maja Kuzmanovic/Belgium & David Tonnesen/USA

T-Garden Responsive Playspace is an interdisciplinary project aimed at dissolving the traditional lines between performer and spectator by creating a media architecture that allows visitors to shape their environment through their movements and their social encounters with other participants. T-Garden is a global collaborative effort between several arts and technology centers and the arts organizations FoAM in Brussels, and Sponge from San Francisco.

Selected by MIT as one of the Top 100 'Young Innovators', Maja Kuzmanovic holds a Master of Arts in Interactive Multimedia. In addition to having held numerous teaching and artist and residence positions, Maja Kuzmanovic is currently director of the newly formed Foundation of Affordable Mysticism (FOAM, at Starlab in Brussels), where she is working with various art and technology collectives, exploring novel modes and resources of cultural expression. Throughout, Maja Kuzmanovic's specialization remains interactive film and storytelling.

In Particle Systems for Artistic Expression, Dr. David Tonnesen will discuss two particular areas of particle systems research. One: a technique for sculpting surfaces, and two: a work in progress for an interactive art installation. A common goal of both projects is to provide flexible tools to aid in personal expression. The focus is to move away from the analytical and point and click style of interface, and towards a more humanistic interface, which re-embodies the user in the physical world.

Dr. David Tonnesen's research interests are in computer graphics, shape modeling, virtual environments, human-computer interaction, and the confluence of art and technology. He received his Ph.D. in computer science from the University of Toronto. Recently he has been working with GMD, Germany and INRIA Rocquencourt, France researching the interactive sculpting of three-dimensional shapes in a virtual environment. In the past he has developed new computer models, based on the merging of physics and geometry, to create special effects for a number of feature length animated films. David Tonnesen is currently participating in Starlab's new spin-off, the Foundation of Affordable Mysticism (FOAM) to help create interactive art installations.

SATURDAY MORNING PROGRAM MAY 19TH 2001 9AM-NOON
Innis Town Hall

SATURDAY MAY 19th 2001, 9AM - George Magalios/USA

In Unconcealment of the Ground Palette an Alternative Paleontological Investigation of a Subtle Technique, George Magalios investigates early visual techniques of symbolic identification. Creating links between cave markings, contemporary design and graphic software, Mr. Magalios suggests there is a palette that exists as the grammar of all painterly and design languages.

George Anastasios Magalios calls himself a site-specific philosopher. He makes images, objects, and performs in order to explore a number of questions concerning our relationship to our organic, social, and technological world. Each question is specifically uttered according to the confines and constraints of a particular site. In his attempts at site-specific philosophy, Magalios employs a number of materials for his installations and actions. Magalios's work attempts to problematize our relationship to new media, hyper-immediate gratification culture, and our collective roots as creative beings.

SATURDAY MAY 19th 2001, 10AM - Johannes Birringer/USA

In New Environments for Dance: Ecologies of Networks, author and professor Johannes Birringer will address some key concerns for contemporary dance and performance practitioners working with new media and telecommunications technologies. Drawing on his experience as director of the Dance & Technology Program at The Ohio State University, Professor Birringer will look at a globalized dance and music culture that can no longer be distilled into separate and "local" traditions; an emergent culture that follows different trajectories of transmission and exchange.

Prolific independent choreographer/videomaker, Johannes Birringer is artistic director of AlienNation Co., an international multimedia ensemble based in Texas, as well as the director of the Dance & Technology Program at The Ohio State University. With an M.A. and Ph.D. from Trier University (Germany), Johannes Birringer has taught performance studies at many universities and has published widely on media and performing arts including his recent books "Media and Performance- along the border" (1998) and "Performance on the Edge: Transformations of Culture" (2000). His artistic work promotes the organic integration of live performance and digital, interactive architectures requiring new processes of composition and motion study. As a choreographer and video producer, he

has directed numerous dance-theatre, opera productions, as well as creating multimedia installations and public arts works around the world.

SATURDAY MAY 19th 2001, 11AM - Evan Harris Walker/USA

Physicist and author Dr. Evan Harris Walker presents Polygons, Neural Nets, Quantum States, and Rainbows. After looking at various theories of consciousness and their applications, Dr. Walker will venture into the vast unknown to consider what may lie behind the peculiarities of consciousness phenomenology. A case in point will be a discussion of the reasons for the structure of our overall visual experience.

Dr. Walker, a physicist, is the Director and CEO of the Walker Cancer Research Institute, inc. He is the originator of the QM theory of consciousness, Observer theory of Psi Phenomena, the author of the Perseus Books publication: The Physics of Consciousness, and an all-round nice guy. Dr. Walker is also something of an artist, having exhibited some of the first computer art. He lives in Maryland and can be reached at wcri@erols.com.

SATURDAY AFTERNOON PROGRAM MAY 19TH 2001 1PM-5PM

SATURDAY MAY 19th 2001, 1PM - Nina Sobell & Stacy Pershall (Parkbench)/USA

Together with artist and collaborator Stacy Pershall, pioneer video artist Nina Sobell presents Thinking of You, an immersive environment where the intricacies of personal communication are explored by combining EEG signals of two participants in separate physical locations which are then expressed live on the web as one 'brain wave drawing'.

Nina Sobell

Since 1969, when she first used video to document participants' undirected interactions with her sculptures, Nina Sobell has been interested in the extent to which video enables her to manipulate the relation between time and space, and to create a vortex for human experience, in which the mediated event coincides with public experience, memory, and relationships. Nina Sobell holds a masters degree from Cornell University and has exhibited extensively around the world. She is widely recognized as a pioneer video artist, being one of the first to integrate video as art.

Stacy Pershall

Since winning a science fair as a teenager, Stacy Pershall has been on a quest to become a true and mad scientist. With a B.A. in theatre from the University of Arkansas, and graduating in 1997 from the University of Cincinnati's College of Design, Art, and Architecture, Stacy Pershall has been applying her interest in neurology, robotics and performance to her art for over a decade. In February 2000, she launched www.atomcam.com, which has now been uploading at least four images every thirty seconds for over a year. She is currently working with Nina Sobell and sound artist Jody Elff, as the current incarnation of parkbench.org.

SATURDAY MAY 19th 2001, 2PM - Bill Marks/USA

From the National Institute of Health in the United States, neuroscientist Bill Marks offers A Scientific Approach to Consciousness and the Infinite: Matter is Made of Experiences and is Endless. In his presentation, Dr. Marks outlines his preoccupation with how universal subjectivity has lead to the evolution of matter and life. Dr. Marks draws a picture where matter is composed of interacting experiences that in turn produce new experiences-an idea that resembles the underpinnings of physics. Dr. Marks applies a scientific approach to exploring how love and beauty, for example, affect our lives more deeply than information.

While studying for his BS in Physics (MIT 1956), Bill Marks became interested in the possible ways humans grow in responsibility and sensitivity. Retaining an approach of a physicist, his preoccupation remains to see how universal subjectivity operating behind the scenes has lead to the evolution of matter and life, and to processes in the brain that personalize this subjectivity. Bill Marks received his PhD at John Hopkins in 1963 and is currently a quantitative neuroanatomist at NIH.

SATURDAY MAY 19th 2001, 3PM - Kathleen Rogers/England

For the past decade, researcher and artist Kathleen Rogers has developed a textual framework and multi-media artworks that reflect her interest in interdisciplinary discourses and cross-cultural consciousness research. For Subtle Technologies, she presents The Imagination of Matter, an integrative model of human consciousness based on cross-disciplinary comparisons of the symbolism of maize in genetic science, ancient Mayan art and mythology, and contemporary Mayan maize cultivation rituals.

Research Fellow in Image Manipulation and Digital Culture at the Surrey Institute of Art and Design. Previously Course Director of the post graduate school of Television and Imaging at Dundee University. For the past decade, Kathleen Rogers has developed a textual framework and multi-media artworks that reflect her interest in interdisciplinary discourses and cross-cultural consciousness research. She has presented work at many international festivals of video and electronic art. Most recently at The Lab as part of the Gateway Project in San Francisco and as part of the international art and science exhibition, Noise at Kettles Yard in London and Cambridge.

SATURDAY MAY 19th 2001, 4PM - Philip Beesley/Canada

Dissociated Membranes by architect and Professor Philip Beesley, explores a particular kind of architectural textiles that he has been making for several years. The fabrics described in Dissociated Membranes have immersive and reflexive qualities. Reflex is a response that suggests the textile being touched touches back. Immersion goes beyond the familiar sense of being clothed and surrounded by a fabric. Here the term implies animated space expanding and dissolving boundaries. In these fabrics, boundaries of our selves—body and psyche—are questioned.

Architect Philip Beesley's research involves digital generation and visualization of structures, physical fabrication of installations in landscape and museum venues, translation of experimental works into architectural tectonic systems, and critical analysis and documentation in a spectrum of public venues. He is co-director of the Waterloo Integrated Centre for Visualization, Design and Manufacturing, a new facility involving rapid prototyping, high performance computing and visualization at the University of Waterloo. Beesley recently received the Prix de Rome in Architecture (Canada).

SUNDAY MORNING PROGRAM MAY 20TH 2001 9AM-NOON

Innis Town Hall

SUNDAY MAY 20th 2001, 9AM - Jane Krakower/USA

From the University of Florida, Jane Krakower presents Space-Time Matrix, a lecture discussing the possible properties of space and its function, while incorporating the properties of time.

Jane Krakower has a BA in Art from NYU, now the New School Of Research. She attended the University Of Tampa in 1973 for six years, where she majored in Physiology as well as the University Of South Florida for three years, where she researched the paper's "Light Source" and "Space-Time Matrix". She has given lectures on both, "Light Source" and "Space-Time Matrix" at numerous seminars and conferences around the world.

SUNDAY MAY 20th 2001, 10AM - Som Naimpally/Canada

Topology and Applications details how abstract pure mathematics has applications in daily life. In his presentation, Dr. Som Naimpally illustrates the concepts of Topology, a formula of mathematics that deals with the concept of nearness at various levels. Overlaying examples of day-to-day existence with an orderly formula provides a rare opportunity to illuminate the interesting, challenging and beautiful patterns in life.

Som Naimpally received a B.Sc., M.Sc., and Ph.D. from the University of Bombay. For over 40 years, he has taught at universities around the world. He has spoken on the topic of Topology at numerous conferences in Italy, Mexico, Belgium and Hong Kong to name a few. Som Naimpally has also published a variety of books and over 100 articles.

SUNDAY MAY 20th 2001, 11AM - Ted Lumley & Jacques Rainville/Canada

Inclusionality: An Immersive Philosophy of Environmental Relationships explores the 'geometry of space' and its management within social systems. Drawing parallels between a variety of examples such as the sun-and-planets, hexagonal cell producing honeybees, and drivers on a crowded freeway, geo-physicist Ted Lumley and artist Jacques Rainville look at issues of collaborative partnership, indigenous tradition, and assertive co-dynamics.

Ted Lumley

After studying physics at the University of British Columbia and working for thirty-two years as a geophysicist in international petroleum exploration, it became evident to Ted Lumley that in natural systems, the geometry of opportunity is the staging ground for all assertive behaviour. In 1996, he began to pursue independent research, working informally with similarly motivated individuals via Internet sharing circles. For the past six years, it has been his goal to investigate and promote systems capable of sustaining community harmony more effectively than the management strategies of mainstream science.

Jacques Rainville

Jacques Rainville graduated from the École des Beaux Arts de Montréal in 1956 and has since worked as a Graphic Artist, Set Designer, Violin Bow Maker, Painter, and Actor. In 1964, he was awarded a Special Mention at the Festival National D'Art Dramatique for his Set Design. He currently lives in Longueuil, Quebec.

SUNDAY AFTERNOON PROGRAM MAY 20TH 2001 1PM-5PM

SUNDAY MAY 20th 200, 1PM - Sageev Oore/Canada

In his presentation, Sageev Oore's applies his experience as both an accomplished musician and mathematician to explore The Space between Music and Science. Discussing fundamental mathematical concepts which he finds to be beautiful or exciting, as well as giving a musical performance, Sageev Oore will seek to find answers to the question of whether art and science really do share a boundary, or whether they are fields too far apart to ever converge.

Sageev Oore has a classical music and science background that includes an undergraduate degree in Math (Dalhousie U.), and performing piano concerti (Mozart, Chopin, and Rachmaninoff) with orchestras including Symphony Nova Scotia (under the baton of the late Georg Tintner). Completing an M.Sc. in Neural Networks, he has spent time exploring a wide range of interdisciplinary performing. In recent years, he has focused energy on improvised music. Currently, Sageev Oore is a PhD student at the University of Toronto, under the supervision of Geoffrey Hinton and Demetri Terzopoulos, designing an interface for computer puppetry to create animation in real-time.

SUNDAY MAY 20th 2001, 2PM - Adam Zaretsky/USA

In Posthuman Temptation, Eros and Mutagenesis, artist Adam Zaretsky talks about his experiences at MIT, where as part of his latest project, he found himself immersed in the 'culture of Post Doctoral scientific research'. As a result of observations in the lab, Mr. Zaretsky poses an interesting question: In the world of biotechnology, which is often morally and ethically paradoxical, what can be defined simply as 'Bad Taste'?

Adam Zaretsky has been a Research Affiliate in the Laboratory for Industrial Microbiology and Fermentation, Department of Biology, Massachusetts Institute of Technology for the past two years. With an M.F.A. in Art and Technology from The School of the Art Institute of Chicago, Adam is a MASTER of art. He also does independent sexwork for fun and profit. Adam Zaretsky has studied parasitology in conjunction with glossolalia at the University of Pataphysics in Salzburg, Austria. Other intrepid rants include "Latex Fetishware and the Binomial: Math Parasites in the World of Rubber Fashion," as well as the soon to be released ode to Galen "Orifice Theory, A Compendium". In 2000, Zaretsky met with Saddam Hussein at a cultural summit in Geneva, Switzerland, whereupon Saddam stated: "No-Fly-Zones *are* parasitolog."

SUNDAY MAY 20th 2001, 3PM - Josh Bongard & Dale Thomas/Switzerland

In his presentation, Biological Growth and the Automatic Design of Robots, Joshua Bongard will demonstrate samples of his work from the Artificial Intelligence Lab at the University of Zurich. Combining ideas from developmental biology with software often used for gaming, Joshua has built computer tools that allow engineers to automatically design-simulated robots. By incorporating an abstraction of natural selection into his software, Professor Bongard has enabled his computer to automatically "grow" virtual robots, or agents, that can accomplish various tasks.

A native of Toronto, Josh Bongard received an honours undergraduate degree in Computer Science from McMaster University followed by a Masters degree in Evolutionary and Adaptive Systems from the University of Sussex in the United Kingdom. He is currently working on a PhD in the Artificial Intelligence Lab at the University of Zurich, Switzerland. In addition to organizing and running a robotics summer school for high school students in Zurich, Josh has demonstrated his artificial ontogeny software in Europe, the United States and Japan.

In The Evolution of Morphogenetic Art Forms, Dale Thomas will look at artificial life and its potential application as an artist's tool and medium. Using the power of natural processes, evolution and growth, interesting forms are produced. The evolution of these forms is directed by a user who can breed and mutate them using aesthetic selection. This method blurs the distinction between artist and critic. It is art by criticism.

Dale Thomas initially trained as an artist and counselor before receiving a degree with honours in Cybernetics and Control Engineering from Reading University. During his years in Reading, he also devoted a lot of time to traveling around England, increasing awareness of science and technology in schools. In 1999, he spent several months working for a UK based, Artificial Life Software company, 'Cyberlife'. He is currently working on his PhD in Switzerland, at the University of Zurich where his work interests involve artificial intelligence, computer graphics, morphogenesis, evolution and interactive art.

SUNDAY MAY 20th 2001 - 4PM

A panel discussion will close out the conference.

Panelists to be Announced

