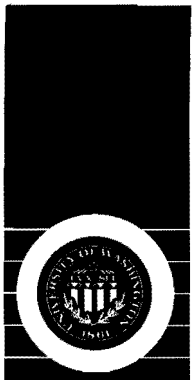

School of Music

University of Washington

University of Washington

THE SCHOOL OF MUSIC

and

CENTER FOR
ADVANCED RESEARCH TECHNOLOGY
IN THE ARTS AND HUMANITIES

presents

A CONCERT OF COMPUTER MUSIC AND DIGITAL VIDEO

Richard Karpen, *director*

8:00 PM
May 24, 2000
Meany Theater

CD 13,761

PROGRAM

CD 13,761

1 *EX VITRO* (7:55) ..... CHAD KIRBY
for didjeridu and real time computer processing
Chad Kirby, *didjeridu*

ON THE PRESENCE OF WATER ..... BRET BATTEY
for video and computer music
not rec.

2 *METAL HURLANT* (12:45) ..... JUAN PAMPIN
for percussion and electronic sounds
Robert Tucker, *percussion*

INTERMISSION

THE ART OF SURVIVAL ..... CASSIDY CURTIS
for computer animation and Students of CSE 458
not rec

MAL.INFORMAL for video ..... THOM HEILESON
not rec

LIFE STUDY #5 ..... RICHARD KARPEN
for computer-realized sounds
not rec

ZOETROPE ..... JOSEPH HYDE
for video and computer-realized sounds
not rec

EX VITRO was written between January–May 2000 using SuperCollider, a real time audio synthesis programming language by James McCartney. In this case, "real time" means that all of the sound generation will take place live—no pre-recorded samples or sounds are used in the realization of this piece. The Macintosh PowerBook next to the performer on stage not only 'listens' to the didjeridu and synthesizes sound accordingly, but also serves as the score: keeping the performer informed about the progress of the piece and giving a general indication of what the didjeridu should be doing at any point in time. *EX VITRO* was composed at CARTAH.

The instrument used this evening is a Hall Didjeridu made from Pyrex® glass by James Hall of Rochester, Washington.

The 'vitro' in the title refers to not only the material from which the didjeridu is made, but also the glass of a laboratory test-tube. This piece is an experimental environment—a laboratory—for investigating the interaction of real-time computer music processes with an ancient drone instrument. The computer's sonic contribution to the piece is intended to emulate and diverge from the didjeridu's rich timbral spectrum and performance practice.

SuperCollider: www.audiosynth.com
Hall Didjeridu: www.halcyon.com/hall
Thanks to Apple Computer for providing the Powerbook for this performance.

CHAD KIRBY currently serves as CARTAH's Technical Coordinator for Digital Arts. In 1998, he earned his Doctor of Musical Arts degree in trombone performance at the University of Washington. Kirby has studied trombone, didjeridu, improvisation, and composition with Richard Karpen, William O. Smith and Stuart Dempster.

ON THE PRESENCE OF WATER (1997) is a sound and image meditation on water as a spiritual and psychological archetype. Computer manipulations of found sound and imagery are knit tightly together to express a narrative of the subconscious. The sound portion of the work was developed at the UW's School of Music Computing Center using an SGI Indigo running Csound, SVP, and Rick Taube's Common Music. Of particular importance were Richard Karpen's phase vocoder extensions to Csound. The video portion of the work was developed at the UW's Center for Advanced Research Technologies in the Arts and Humanities. The primary materials were Hi-8 footage and high-resolution still images manipulated with Adobe Premiere. Special thanks to Katie Sauter and Andrew Hendry of UW Fisheries for a number of images used in the work. *ON THE PRESENCE OF WATER* received an Honorable Mention from Austria's Prix Ars Electronica and was a finalist for the SEAMUS/ASCAP student commission award.

BRET BATTEY'S electronic, acoustic, and multimedia concert works and installations have been presented in diverse venues in the United States, Europe, and Asia, including the Korean Electroacoustic Music Society Festival, the Bourges, France Synthese Festival, the Hungarian Radio Summer Meeting of Electroa-

coustic Music, the International Computer Music Conference, MTV Europe, Sonic Circuits V, Seattle Experimental Opera, and the Microsoft Advanced Technology Group. He pursued his doctoral studies in music composition at the University of Washington, where he also completed his Masters work. He received a Bachelor of Music degree in Electronic and Computer Music from Oberlin Conservatory and has worked in Manhattan at the Philip Glass production studio and Studio PASS, a non-profit studio for sound artists. Teachers in music composition and technology include Conrad Cummings, Joel Francois Durand, Richard Karpen, Gary Nelson, and Diane Thome.
http://www.BatHatMedia.com/

METAL HURLANT (1996). We live in a society of immaterial materials. More and more, we manipulate things we are unable to touch. Sounds and images traveling through networks at increasing speed reach us everyday, but their apparently physical presence is no more than the semblance of digital information. The intangibility of sound compounded with the homogeneity of the digital medium contributes to digression from the qualitative aspects of acoustic material.

In the process of abstracting sounds into notes or events, notes into numbers, and numbers finally into bytes, the digital medium runs the risk of losing qualitative differences intrinsic to sound. The seeming immateriality of music may result in the tendency to entrust the process of compositional work to the logic of algorithmic procedures. Exclusively guided by a processual logic, music produced in this fashion depends on a set of basic logical expressions and their associated rules of transformation. A composition mainly governed by formal operations ends up in most cases neglecting the acoustic quality of musical material. One of the intents of my project is to reverse the tendency toward homogenization and hierarchization the digital medium induces in the composer.

METAL HURLANT has been composed for a percussion player (playing metallic instruments) and computer generated sounds. The hybridity of the piece serves a qualitative logic. Atonal music during the '20s and serialism later stressed what Adorno referred to as the inner logic of procedures. In contrast, this work follows the logic of the sound materials, not the logic of the procedures, to shape acoustic matter.

The acoustic material comes from a studio recording of metallic percussion instruments. Spectral analysis of these sounds provides the raw matter for the composition. This data is a digital representation of the qualitative traits of metallic percussion. It defines the range of acoustic properties available for manipulation and determines the further behavior of qualitative traits in the overall composition. In this way, qualitative parameters supply compositional parameters.

Access to the interiority of the sound material is mediated by the digital medium. In this work, the digital medium does not flatten the qualitative structure of matter. On the contrary, spectral analysis is used here to explore what can be called the sound "metalness" of the selected instruments. Since the range of compositional operations is provided by the isolated sound metalness, to

certain extent the qualitative structure of the material takes command over the compositional process. Moreover, the metalness ruling the computer generated sounds furnishes the morphological boundaries of the instrumental part. *METAL HURLANT* is an expression of metalness sculpted on percussion and electronic sounds.

JUAN PAMPIN was born in Buenos Aires on January 23, 1967. In that city, he studied composition with Oscar Edelstein and Francisco Krupfl. He holds a Master in Computer Music from the Conservatoire Nationale Supirieur de Musique de Lyon, where he studied with Denis Lorrain, Robert Pascal and Philippe Manoury. He received a Doctorate in Musical Arts (DMA) in Composition from Stanford University, where he worked with Jonathan Harvey, Jean-Claude Risset, and Brian Ferneyhough. In 1994, as a Visiting Composer at the Center for Computer Research on Music and Acoustics (CCRMA), Stanford University, he composed the tape piece Apocalypse was postponed due to lack of interest that received a Residence award in the Concours International de Musique Èlèctroacoustique de Bourges 1995. He has been composer in residence at the LIEM-CDMC studio in Madrid, and guest lecturer at Quilmes National University in Argentina. For the last four years, Juan's main composition project has been a cycle of percussion pieces with electronics: Metal Hurlant (1996), Toco Madera, (1997), Skin Heads (1998). This cycle was completed with the percussion sextet On Space, commissioned by "Les Percussion de Strasbourg" for the opening of the "Musiques en Scene 2000" festival in Lyon, France. During the 1999-2000 academic year Juan Pampin is visiting composer and researcher at the Center for Advanced Research Technology in the Arts and Humanities (CARTAH), University of Washington.

ROBERT TUCKER returned to his native Washington State after receiving degrees from the Peabody Conservatory and the University of Southern California. He can be seen performing regularly with the Seattle Symphony, Seattle Opera, and Pacific Northwest Ballet orchestras. As a chamber musician, Mr. Tucker has performed with Sonora, Seattle Chamber Players, and the Pacific Rims Percussion Quartet. He is also busy as a studio musician, recording numerous motion picture soundtracks and commercials.

THE ART OF SURVIVAL (1998) was the class project for the University of Washington's CSE490 Computer Animation course in 1998. The course brought together students from Computer Science & Engineering, Art, and Music for one quarter to learn computer animation and another quarter to create a complete animation short from the ground up. *THE ART OF SURVIVAL* is part of the 1999 Spike and Mike Classic Festival of Animation. It appeared in the 1998 International Ottowa Animation Festival where it was one of 80 films selected from more than 1200 entries representing nearly 50 countries. It was also presented as part of the London Effects and Animation Festival.

MAL.INFORMAL (1997) is a short video work which uses a surreal semi-narrative and experimental techniques to explore, in a non-linear way, issues in communication and miscommunication in the "information" and electronic age. "Communications technology and 'borg-ification' are the targets of this satire. Ironically, this work artfully employs the same technology it criticizes. Grainy video interspersed with brilliant splashes of Technicolor contrast what is real and what is hyper-real.

THOM HEILESON is an artist working with digital media in a variety of forms. A graduate of the UW School of Art's Photography MFA program and a former graduate research assistant at the Center for Advanced Research Technology in the Arts and Humanities, he has worked in digital video, digital & analog imaging, and electronic music, as well as internet-based works. One major interest of his is the use of developing technologies to generate new ways of exploring ideas in non-linear fashions.

LIFE STUDY #5 (1996) Richard Karpen's *Life Study* series of computer-realized compositions explore a genre that has been called "aural cinema". Many of the materials heard in these works were derived from "ready-made" recordings although some of what is heard may not what it seems to be while some sounds are completely synthetic. There are no "stories" or programs in these works, but they do have a narrative quality, especially when the sound materials are directly recognizable, giving the impression that there might be extra-musical meaning. This ambiguity is intended of course! In *LIFE STUDY #5*, there are juxtapositions of the sounds of a flag in the wind, footsteps on gravel, a truck engine starting and idling, orchestras tuning, paddle steamers, other boats, monkeys, music from *Life Study #2*, Bach's *Art of the Fugue* and more (both musical excerpts are synthetic it should be noted and the Bach is altered from the original). The succession of materials leads in a specific direction over time as a collection of colored tiles in a mosaic might form a design or picture when seen from a more distant perspective. As the work unfolds, the form become more evident and the expressive direction becomes clearer. A wide array of signal processing techniques were used to synthesize and/or process the sounds for this work. The piece was composed primarily with the composer's additions to the Csound synthesis language. *LIFE STUDY #5* was commissioned by the Groupe de Musique Experimentale de Bourges and was composed in Seattle and Bourges in 1996.

RICHARD KARPEN (b. 1957) is Professor of Music at the University of Washington in Seattle where he has been teaching composition and computer music since 1989. He is also Director the UW Center for Advanced Research Technology in the Arts and Humanities (CARTAH). Karpen's works are widely performed in the U.S. and internationally. He has been the recipient of many awards, grants and prizes including those from the NEA, the ASCAP Foundation, the Bourges Contest in France, and the Luigi Russolo Foundation in Italy. Fellowships and grants for work outside of the U.S. include a Fulbright to Italy, Stanford University's *Prix de Paris* to work at IRCAM, and

a Leverhulme Visiting Fellowship to the United Kingdom. He received his doctorate in composition from Stanford University, where he also worked at the Center for Computer Research in Music and Acoustics (CCRMA). He is a native of New York where he studied composition with Charles Dodge, Gheorghe Costinescu, and Morton Subotnick. In addition to Karpen's work in electronic media, for which he is primarily known, he has composed symphonic and chamber works for a wide variety of ensembles. His compositions have been recorded on CD by Le Chant du Monde/Cultures Electroniques, Wergo, Centaur, Neuma, and DIFFUSION i MeDIA.

ZOETROPE (1998) is a dangerous and perverse experiment in alchemy. Machines are pushed until they break, sound is pressurised and overheated until it bubbles over into light.

It is an object made from technological detritus—howling feedback, power spikes, white noise and video snow; the blank blue screen, flickering slightly. This raw material was melted and moulded until it at last took on a new sheen of artifice, but its original character keeps on breaking through.

It explores issues around the relationship between people and machines, and questions perceptions of the 'perfection' of technology. It is about use and misuse; abuse, breakdown. It speculates about what happens between video frames, when a waveform crosses zero for an unmeasurably short period of time, or when a switch is positioned exactly half way between off and on.

It questions the illusions of technology; that there is something beyond the TV screen, or between the loudspeakers; that a succession of still images constitutes movement, or that a dead, pre-recorded voice is alive.

Sound is absolutely at the centre of *ZOETROPE*. It is the sound that carries the piece, dictates its form. The video images are forced to conform to 'musical' rules, made part of the texture of something that is essentially a piece of music.

As such, it takes its lead from the 'Visual Music' of pioneers of film animation such as Viking Eggeling and Norman McLaren, but with a fundamentally different approach—where their work used artificial images and the aesthetic language of Neoclassical instrumental music, *ZOETROPE* uses concrete sounds and images and the language of Musique Concrete. It also takes on a little of the LoFi/HiTech gloss of MTV, whilst remaining (I hope) one step removed.

Sound and image have a complex relationship in the work; not so much mixed as interleaved. They flutter around each other, not quite making contact, but defining one another, by absence as much as presence. They work together to make a meta-texture, highlight aspects of one another, but remain essentially independent.

ZOETROPE exists on tape, as a performance (suited to a concert environment), and as an installation (suited to a gallery). The performance version may also be played with sound only.

Don't watch the light; watch the spaces between.

JOSEPH HYDE (b. London 1969) uses digital and electronic media to make sonic and multimedia works, installations and performances. Particular areas of exploration in his work are the complex interaction of abstract sound and image,

and the integration of interactive technology into live performance. His background in music makes itself felt through an overriding concern with sound and structures in time. His work has won a number of awards and mentions, in competitions such as the Transmediale (1999), COMTECart (1998), the Concours Internationale at Bourges (1993, 1995, 1997), the Concorso Luigi Russolo (1994, 1995), and Prix Ars Electronica (1997, 1998). It has been commissioned by bodies such as the BBC, Sonic Arts Network, The Digital Arts Development Agency (DA2), The International Symposium on Electronic Art and the Groupe de Musique Expérimentale de Bourges. It has been performed at events such as the New York and Montreal film festivals, Pandaemonium, Transmediale, the International Computer Music Conference, the Gaudeamus festival and the IRCAM Summer Academy.

The Center for Advanced Research Technology in the Arts and Humanities (CARTAH) is a multimedia research center at The University of Washington. For more information about CARTAH, see: http://www.washington.edu/cartah