The Sound Studios of the Banff Centre for the Arts

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Abstract

The sound production facilities of The Banff Centre for the Arts support the work of musicians, composers and sound artists in a variety of contexts. Areas of activity include music recording, studio-based composition, radiophonic art, sound design for TV/video and multimedia, virtual environments, and interactive systems and installations. Technical resources range from a 24-track digital recording studio with several levels of computer automation and assistance, to small personal studios equipped with simple computer/MIDI workstations. While the focus of activity is artist production, the possibilities of the facility are enhanced by a parallel program of applied research that aims to develop advanced technologies designed by and for artists.

1 Introduction

The Banff Centre for the Arts is a post-graduate, professional-level institution that provides advanced career support for artists in many disciplines, including visual, performing, media and literary arts. A range of computer and electronic technologies for the arts, including sound recording facilities, computer music, and computer audio applications are supported through the Media Arts division.

Media Arts was established in 1990. It consists of three connected programs: Audio, Computer Applications & Research, and Television & Video. In keeping with The Banff Centre’s mandate to develop the creativity of the individual artist to explore connections and inter-relationships among forms, practices, media and traditions, and so act as a catalyst to cultural practice in transformation, Media Arts has focused on developing an artistic and socio-cultural context for technology in the emerging digital culture of the 1990’s (multimedia, virtuality, high-bandwidth connectivity).

2 Program Structure

The three programs of Media Arts share facilities, equipment, and staff. Applicants are invited to make project proposals to a single program or to any combination of the three. Where appropriate, applicants may also be supported through a joint residency with related programs at Banff, such as Music, Music Theatre, or Art Studio.

Artists enter Media Arts programs as residents, receiving full scholarship, board accommodation and a meal plan. Residencies are generally project-based, and the duration of each residency ranges from one week to three months, depending on the extent of the project. Applications are judged on the basis of artistic merit, community significance, feasibility, and conformity with the objectives of the program. Applicants are expected to be at the professional or post-graduate level.

Associateships are offered to audio engineers and computer audio technologists with mature artistic insight and advanced practical skills (significant professional experience within an artistic environment, a master’s level degree in music and sound recording, or equivalent). Associates are primarily involved with assigned recording/production work in collaboration with resident artists, but may also initiate creative projects. Associateships may extend for up to six consecutive sessions (two years). Associates receive a stipend in addition to scholarship.

The program operates for 40-segment sessions per year: Fall (Sept.13 - Dec.17, 1993), Winter (Jan.3 - April 1, 1994) and Summer (June 6 - Aug.12, 1994). Application deadlines are twice per year, Jan.1 and June 1.
2.1 New Media Research

Since 1992, Media Arts has undertaken New Media research, an initiative of applied research directly related to its program activities. New Media Research resources and staff are largely independent of the residency programs. It is funded by the Government of Canada (Centre for Information Technologies Innovation, Department of Communications) and industry sponsors. Much of the research is carried on in collaboration with institutional and industry partners. The staff dedicated to research (on-site at Reff) is quite small, including three or four programmers, and an administrator.

3 Facilities and staff

The sound studios include four control rooms and three recording spaces of varying configurations and dimensions. All of these areas are tied together with a comprehensive signal-routing system that distributes analog audio, digital audio, video, machine control, SMPTE, MIDI, and Ethernet data. Each control room includes a Digidesign SoundTools or ProTools system, as well as DAT mastering and EtherNet connection, providing a reasonable degree of facility compatibility and portability. The computer music environments are largely Macintosh, with software emphasis on Opcode's MAX Vision, Studio Vision, Galaxy + Editors, OMS, etc. Most other Mac-MIDI software is also available.

The largest control room (Lucas Control Room) is a 24-track all-digital environment, with Sony DASH-format (1 x 24-track, 2 x 2-track) and DAT recorders (2-machine editing system with DAT-7000 controller), Sony MDX-500 series console with 36 I/O strips and J.L. Cooper Macintosh-based fader/mute automation, Digidesign Sound Tools II system, and a variety of top-quality processing gear, microphones, and a Mac-based MIDI sequencing and control system. Betacam SP machine control and audio/video synchronization is provided by a Soundgraphix (PC-based) system.

The MIDI control room (EARS, or Electroacoustic Recording Studio) is Macintosh-based, and includes a variety of MIDI sound modules (Yamaha, Roland, Sequential Circuits), 16-track and 2-track Tascam recorders, 3/4-inch video capability with Fonex synchronization, and a Soundcraft 24 x 16 x 2 console for monitoring and production. Software includes MAX, Studio Vision, Digital Performer, Master Tracks Pro2, Galaxy + Editors, SoundTools II, Encore, Producer, and many more.

The audio-for-video control room (Rice Audio Control) centers on a Digidesign ProTools 8-track digital editor system, Studer / Dolby SR 8-track recorder, Sony DAT recorder, and Sony MXP-3000 series console with 24 I/O strips and J.L. Cooper automation. The video format is Betacam SP, with SoundGraphix audio/video sync.

The smallest control room is a Macintosh/MIDI workstation with simple 16-track monitoring, suitable for composition and pre-production work. There is an additional audio production space in the New Media Research Centre, scheduled to open in mid-October (1993), which will be home to the MixNet development system and NeXT / ISPW workstations (2 Cubes, 1 TurboStation, 3 ISPW processor cards).

Facilities for television production and real-time digital imaging are extensive, including a Silicon Graphics Onyx "Reality Rack" 2 SGI VXS-310 computers, and a comprehensive Sony Betacam SP studio and post-production facility, including a 3-camera studio, 2 online edit suites, 2D and 3D effects, etc.

The staff of the audio program consists of Program Director Kevin Elliott (artistic direction), Studio Engineer Paul Herspigel (day-to-day operations), and Senior Technician Chris Segnit (maintenance and systems design). In addition to the staff, a team of four audio associates is largely responsible for audio operations and artist support. Administration is shared with the other programs of Media Arts.

4 Examples of production

All three Media Arts programs focus on production. Audio concerns itself with the creation of new repertoire, work that expresses the medium in new ways, and work that connects sound with other mediam and disciplines, below are some representative examples of recent and forthcoming residencies in the principal production categories.

4.1 Music recording

Robert Normandeau (Summer 1993): Tangram and other multi-channel works. Stereo realization for CD release.


David Tudor (Fall 1993): Neural Synthesis. Stereo realization for CD release.
4.2 Computer music


4.5 Sporadic composition


Francis Dyson / Douglas Kahn (Summer 1993): Title TBA, multi-channel audio work. Developed, recorded and realized for simulated binaural and stereo versions.


4.2 Virtual environments


4.4 Interactive systems

Daniel Dion / Marc Patch (Winter 1993): TBA, multi-channel video and audio interactive installation system. Developed and produced for exhibition at National Gallery of Canada.

William Bauer / Steve Gibson (Summer 1993 / Fall 1993): Objects of Ritual, audio and image projection interactive installation with motion tracking system. Developed and exhibited at The Banff Centre.


5 Selected discography

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