

THE  
MUSIC  
OF  
GORDON  
MONAHAN



Meta-physics and Mechanics:

EXCURSIONS

**T**he sonorities which Canadian composer Gordon Monahan works with constitute music in the same way that prolonged sound constitutes pitch. The physical and aural properties of pure and electronically-influenced acoustic sound have been the object of his thinking and performance over the past eight years. At the essence of each piece lies an idea which is simple and straightforward, informed by a broad spectrum of interest ranging from physics and found sound to popular music and technology. Monahan's concerns are manifest in three pieces in particular: *Piano Mechanics* (1981-86), *Long Aeolian Piano* (1984-86), and *Speaker Swinging* (1981-87). The recording of these last two pieces was released on November 28 at the Music Gallery in Toronto, and constitutes a concrete document in an otherwise fluid practice.

Young Gordon was born in Kingston, Ontario in 1956 and grew up mostly in Ottawa. He began playing piano at age eight, and at twelve started a rock group where he played electronic organ and recorded. He later studied physics at the University of Ottawa, then transferred to Mount Allison University in Sackville, N.B. to study piano performance. At Mount A. he also acted with a campus theatre company.

Monahan's early interest in electronics and recording, his knowledge of physics and traditional piano technique (facilitating his radical departure from it) and his experience as a theatrical performer influence his work. He often handles recording equipment and instruments in the most primitive way possible. "I like to work with primitive technology that has a raw sense to it ... and if I can plug something in that's going to have a life of its own and do something unexpected ... then I'll make music out of it."

Yet Monahan's virtuosity as a composer encompasses a broad range of raw materials, from homemade instruments and junk from Active Surplus to sophisticated digital studio recording equipment and video. His music can be direct and primitively produced, yet ethereal and foreign as made sound. It occupies a space between sound and music, aural invention and discovery. The performances embody process and ritual. The recordings are double-feedback systems where electronically generated sound may be acoustically manipulated or vice versa and recorded in such a way that naturalness and interference are equal. Neither domain of sound evolves clearly from the other and both feed back into a whole which is integrated, heterogeneous and anti-hierarchical in its tonality.

Monahan's final project at Mount Allison was a piece of electronic music based on the complex and infinitely

varied tidal patterns of the Bay of Fundy. *Tidal Resonance at 45°N 64°W* was an early reconciliation and synthesis of seemingly polar interests, synthetic music and the perpetual forces of nature. When the piece was realized in 1983 at the Newfoundland Sound Symposium in South Balline, Nfld., speakers were put down on the beach and the electronic sounds arising from the patterns were played back, blending into the environment from which they had originated. This cyclical source manipulation and recapitulation and other circular patterns have since become characteristic structures in Monahan's work.

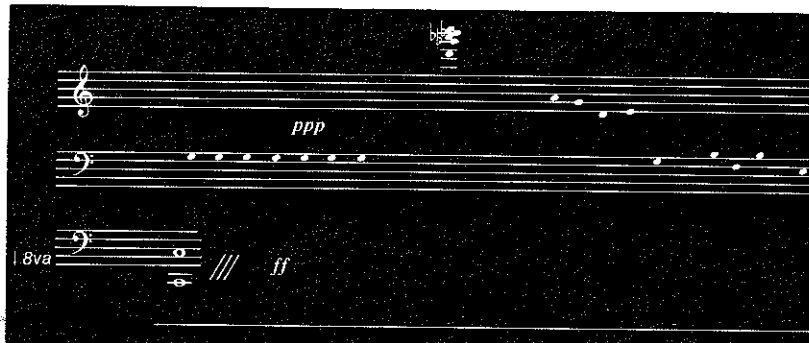
Monahan's ongoing work with acoustic piano produced two pieces which were recorded on his first album (1986), *Piano Mechanics* and the related *Large Piano Magnified*. Unlike his other work, *Piano Mechanics* is scored, the performer carrying out tasks dictated by the composer. The piece simulates the formal gestures, sounds and mechanics of machinery and the demands it makes on the performer are like something out of Lang's *Metropolis*. It is "a catalogue of actions and activities which address the production of isolated acoustical resonances at the piano.... One's duty with *Piano Mechanics* is to induce the piano to play like a machine ... to serve the action by playing as hard as one can. Sometimes the fingers may bruise and bleed as you hammer the key repeatedly...".

Although the piano here is in no way "prepared" or electronically reinforced, the sonorities elicited by direct and often brutal string, keyboard and pedal techniques are powerful and unprecedented. John Cage has described them as "absolutely astonishing. He produces music by playing the piano keyboard. Without anything electronic he produces in fact what one associates with electronics.... What happens is that the piano under Gordon Monahan's performance of it produced sounds that we haven't heard before."

*Piano Mechanics* is aurally independ-

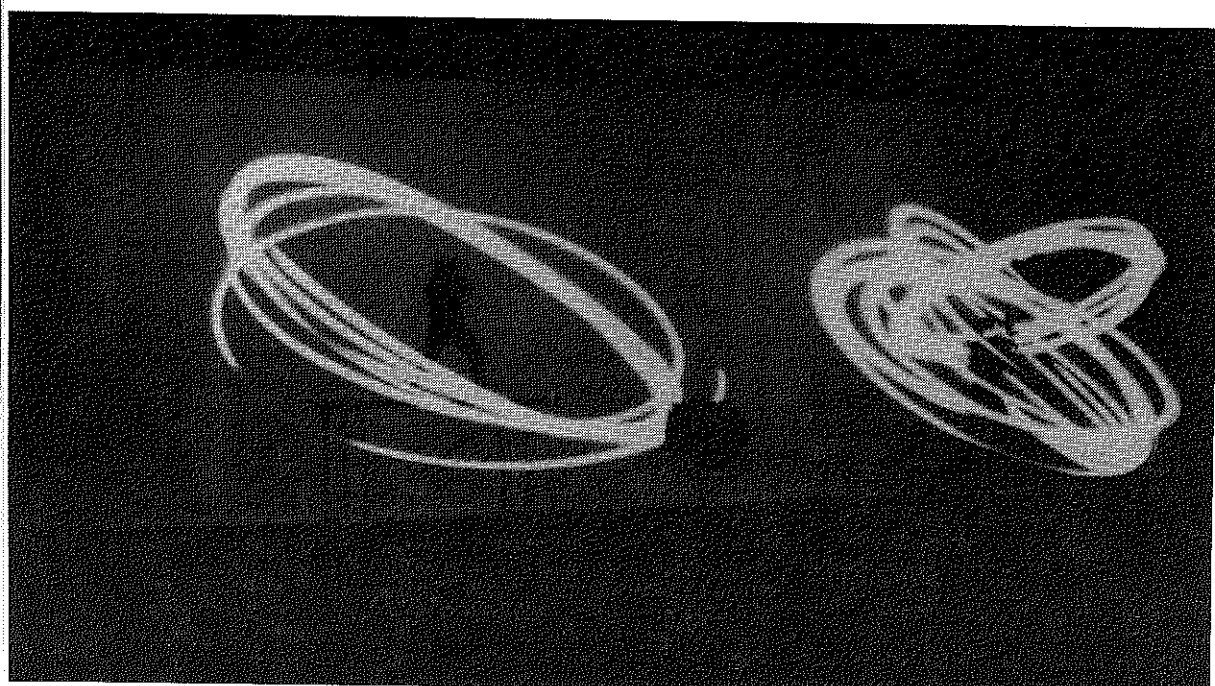
known anything about electronic music I don't think I would have gone to the aesthetic limits that I did with *Piano Mechanics*."

The final score for *Piano Mechanics* (fig.1) was completed in February, 1986 and exhibited at the Music Gallery with photographs of Monahan's performance by



a phenomenon which the Greeks regarded as supernatural evidence of an eternal harmonic music, the harmony of the spheres. Such music occurred naturally in the universe as a genera-

began to explore v using the Doppler reversing his thin conception of resp sound emitting fro



ent of, yet indebted to, electronics and the extent to which electronic sound opened up the possibilities of Monahan's acoustic vocabulary is radical. "I would never have written *Piano Mechanics* if there were no such thing as electronic music. I was trying to create sounds at the piano that we hadn't listened to before, but at the same time my real physical basis was electronic music so that I could play something and say, yeah that sounds like it's being processed. If I hadn't

Toronto photographer David Hlynsky. This is one of several visual collaborations which Monahan has been involved with. The recording is unmanipulated real-time taping of a performance by Monahan where the stretch and pull of sonorities described by Cage are clear and vivid.

In New Brunswick, Monahan met photographer and teacher, Thaddeus Holownia. *Long Aeolian Piano* was first constructed in July 1984 on Holownia's farm in Jolicure and still exists there, "installed" in the environment. It is constructed using 100-foot wires strung at high tension between the soundboard of a piano and posts driven at various points in the surrounding field. The piece operates on the same principle as the ancient Greek aeolian harp, a large stringed instrument built out-of-doors. Wind blowing over the strings produces continuous, varied tones and overtones,

tive, potential energy, to be discovered and reproduced by man. The notion of music as the condition of Origin, common to ancient Greek and Eastern religions, was reiterated by Johannes Keppeler, the neo-Platonists and Cage, and holds great appeal for Monahan.

The aural effects produced by the aeolian piano are tranquil, spatial and subliminal, again not unlike those which electronic composers strive for through synthetic means. In a 1986 version of the piano produced in Edmonton and recorded on video, Monahan integrated the installation and performance bases of his work. A small, tentative crowd was drawn to watch his careful, strenuous manipulations of the radically altered piano, reinforced and strapped to a tree with wires bolted aggressively to the front and back of the exposed soundboard. By plucking and dampening the wires and leaning against the wires and the instrument itself, he produced subtle variations in the sound. Throughout, the atmospheric conditions of air pressure and wind velocity determined the nature and intensity of the music. These effects are left unaltered in the recording. The music co-exists with the sound of the wind — source, animator, integral element.

Monahan moved to Toronto in 1980 and on the suggestion of Holownia

toward one of con source is an active work. *A Magnet T Attracts* was an in equipment worthy sale, and rigged up Gallery, a display Union Station in F loudspeaker, now piece, is catapulted caught at the height magnet. The jolt of the needle on the a the magnet playing *Bobby Christian, S Age*. The speaker i magnet and placed by the mechanical process is repeated Monahan, the spea "tongue-in-cheek r ing sculpture that medieval weapon musical studio sys

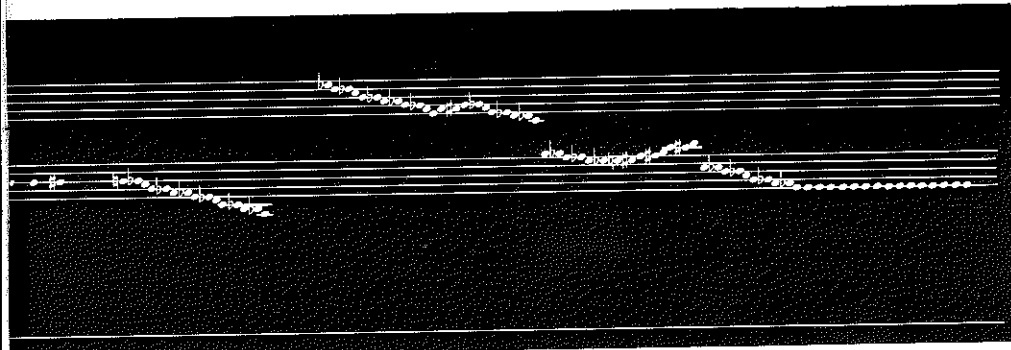
*Speaker Swinging* process in Monaha literally a tour de f practices. Optimal whirl speakers over in a circle twenty-t The sounds emitted speakers are produ ance by six audio-t which gradually va sawtooth waves, an pre-recorded materi the live oscillators speed and to some of the swinging is o

began to explore ways of making music using the Doppler Effect. This involved reversing his thinking away from a conception of responsive, mutable sound emitting from a stable source

physical strength of the performers.

At the controls, Monahan modulates the sound, eventually aligning it with the resonant frequency of the hall.

the forces of nature itself to operate in concert, he will continue to evolve music which now rests silent, possible and profound.



#### SOURCES

Radio interview with the artist, *Brave New Waves*, CBC-Stereo, September 30, 1987.

Dr. Janet Hammock, "The Pianoforte: A Museum Piece?" Delivered May 26, 1987 to the Canadian University Museum Society.

Statements by John Cage, *Houston Public News*, Houston, April 10, 1986.

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Both Monahan's albums, *Piano Mechanics/Large Piano Magnified* (1986) and *Long Aeolian Piano/Speaker Swinging* (1987) can be obtained from Marginal Distribution, 37 Vine Ave., Toronto.

Monahan's videotapes, *A Magnet That Speaks Also Attracts* (1986), *Long Aeolian Piano* (1986) and *Speaker Swinging* (1987) are available through V/Tape, 183 Bathurst St., Toronto.

#### PHOTO CAPTIONS/CREDITS

Gordon Monahan, *Speaker Swinging*. Photo, Reimer/Siegner. Page 8

Gordon Monahan and Thaddeus Holownia, *Long Aeolian Piano* (detail). Photo, Thaddeus Holownia. Page 7

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toward one of constant sound whose source is an active, mobile agent in the work. *A Magnet That Speaks Also Attracts* was an installation built with equipment worthy of any good garage sale, and rigged up in the Eye Revue Gallery, a display window in Toronto's Union Station in February, 1986. The loudspeaker, now the focus of the piece, is catapulted in mid-air and caught at the height of its trajectory by a magnet. The jolt of this action causes the needle on the adjoining record-player to skip so the speaker hangs from the magnet playing a new excerpt from *Bobby Christian, Strings for the Space Age*. The speaker is hauled off the magnet and placed back on the catapult by the mechanical system and the process is repeated. According to Monahan, the speaker catapult is a "tongue-in-cheek mechanical performing sculpture that is a combination medieval weapon system and modern musical studio system."

*Speaker Swinging* is the most recent process in Monahan's repertoire, literally a tour de force of his ideas and practices. Optimally, three performers whirl speakers overhead "lasso-style" in a circle twenty-two feet in diameter. The sounds emitted through the speakers are produced live in performance by six audio-tone generators which gradually vary between sine and sawtooth waves, and segments of prerecorded material are mixed with the live oscillators in process. The speed and to some extent the duration of the swinging is contingent upon the

During that phase of performance when this unity is achieved and the acoustic resonance of the room itself comes into play, the audience in subject to physical as well as auditory sensations caused by the music. At this point the lights are suddenly shut off. After a few moments lights affixed to each speaker are illuminated and instantly a super-modulation of shadows is thrown wildly around the room.

The listener's initial response is a strenuous attempt to reconcile the shock of sudden darkness and the hypnotic, sustained monophony of the sound. The secondary response involves the awareness of the spatial manipulations which Monahan exercises. The dimensions of aural, visual and temporal space are transformed as the music progresses, stretching and undulating like a slow-motion replay of itself, or a drastically protracted note in vibrato.

In recording, these sensory phenomena (without the vibrations of resonant frequency) come through the speakers; without the elements of surprise and fear which Monahan seeks live, the effect is one of tranquility and illusion. The recent videotape of *Speaker Swinging*, produced in conjunction with Toronto designer Bruce Mau, seeks to achieve video equivalence of the piece in performance.

Gordon Monahan is currently living and working in New York. He continues to refine performances of *Speaker Swinging* and has now plunged into fluid mechanics, developing the basis for an aeolian piano using water currents instead of air ("aqua-aeolian" his term). Other ideas for sound sculpture continue to involve piano, piano-string and wind phenomena, although his move to NY leaves him open to urban influences of the densest kind. As long as Monahan insists on re-examining aurality at its most fundamental levels and allows mechanics, electronics and