

Cort Lippe

Program Notes

Music for Harp and Tape (1990) was commissioned by and written for the harpist Masumi Nagasawa, and premiered by her at the Ueno Cultural Center, Tokyo in March of 1990. The tape part was created at IRCAM, Paris using the control program *Max* (developed by Miller Puckette, whose technical advice made this piece possible) along with signal processing and control software written by the composer and Puckette for the 4X real-time digital signal processor; and the digital mix of the final tape part was made with the valuable assistance of the sound engineer Xavier Bordelais. The piece is divided into four main sections. Tremolos at registral extremes define the first section. The second section uses a repeated sforzando chord in the highest register to separate gestures exploring descending major and minor seconds. Muted chords becoming arpeggios characterize the third section, and the use of two clearly separated layers and extended techniques make up the fourth section. The tape part is composed entirely of digitally transformed and processed harp sounds taken from the composed instrumental part. The computer system tracked parameters of the harp, such as pitch, amplitude, continuous pitch change, rests, articulation, tempi, etc., and used this information to continuously control and/or influence digital synthesis algorithms running in real-time on the 4X. Time stretching, granular sampling, and other more standard signal processing such as harmonizing, frequency shifting, phasing, spatialization, etc., were employed. The instrument/machine relationship is entirely symbiotic—the instrument and tape are equals in the musical dialogue. At times one part may dominate, but in the overall formal structure, a duo is implicit.

Music for Harp and Tape won first prize in the *1991 19th Annual Electronic Music Competition of Bourges, France*, and honorable mentions in the *1991 Kennedy Center Friedheim Awards of Washington D.C.*, and the *1993 Prix Ars Electronica of Linz, Austria*. The piece is recorded on the *Harmonia Mundi* label by Masumi Nagasawa, and the *Centaur* label by Asuncion Claro.