

$C_{12}H_{14}N_2O_2$ (*Serotonin*) (2008)
for piccolo and computer

$C_{12}H_{14}N_2O_2$ (*Serotonin*) for piccolo and computer is the second of a set of works that engage the influence of humanly-produced chemical compounds on extraordinary experience. Influenced by Paul Klee's notion of 'taking a line for a walk' and Italo Calvino's expression in *Cosmicomics (The Form of Space)* that a line in cursive writing is a continuity of ink laid out on a page that is bent into complex and elaborate shapes and spaces. In so doing, the inky line can conjure forth a second-order meaning beyond its linear design; the continuing ink flow means something graphic, spatial on its own but in addition, the bending intelligently encodes a more specific, second, lingual meaning. Related to and emerging from these extra-musical ideas, *Serotonin* is essentially melodic, presenting a linear discourse that is what it is but also accrues potential meaning beyond its shape. The piece divides into four parts, each developing and expanding on the sections that precede it. The computer music in *Serotonin*, (developed Max/MSP), results from real-time processing of the live piccolo performance. The computer music adds a dimensional, spatial perspective on the piccolo line projecting an expanded presentation of the line's immediate past as an afterglow memory of the piccolo discourse. Combined the two parts offer fleeting line and residual memory immediate and more than immediate.

As with many uses of Max/MSP, this piece uses standard-issue Max/MSP objects and also owes much to other developers including Richard Dudas' for the Newverb~ object, and Miller Puckette, Ted Apel and David Zicarelli for the fiddle~ object used for pitch and amplitude tracking. The granular synthesis approach used in the piece was developed from the granular sampling example offered in the Max/MSP distribution by Les Stuck and Zoax. FFT-based spectral filtering is done with a modification of the *Forbidden Planet* example patch by Zack Settel, Cort Lippe and Zoax. Thanks are also owed to Erik Oña, Cort Lippe, and Miller Puckette who offered the model for the cross-bar mixing method using menu-driven routing and the matrix~ object that is the basis of the structure of the processor and thanks to Chris Dobrian for the windowed buffer recording methods used in the piece.

$C_{12}H_{14}N_2O_2$ (*Serotonin*) was commissioned by Elizabeth McNutt.