

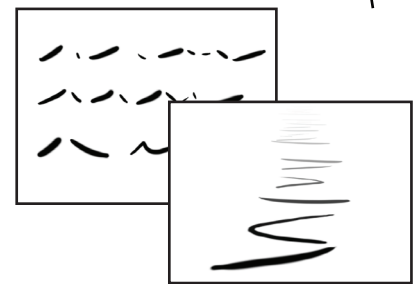
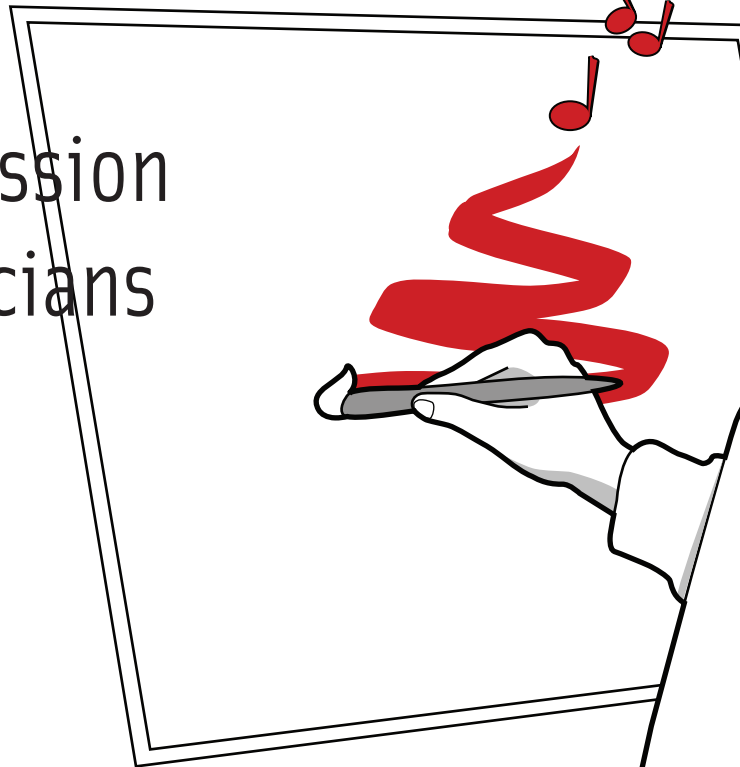
# Articulated Paint

## Musical Expression for Non-Musicians

Articulated Paint is an electronic musical instrument that provides an experience of the role of the body in musical expression.

Using the classical artist's tool of brush and canvas, the player determines expressive qualities of a piece of music such as tempo, dynamics, accentuation and binding.

Bodily and musical expression condition each other.



### MOTIVATION

The idea originated in our observation of the strong bodily experience of listening to and making music. The musician moves his body in an expressive conjunction with the music he plays. We want to highlight this experience and make it available to non-musicians.

Moreover, non-musicians are enabled to play expressively without having to learn how to play individual notes.

### DESIGN PROCESS

We explored the idea by doing a self-study of playing an instrument. We observed patterns in body movement that generally related to musical qualities. We then found the brush to provide rich haptic and visual feedback as well as precision. It also requires a skillful use of the whole body to achieve artistic expression, while being easy to control for beginners. In a further non-technological user study, we then developed the proper mapping of brush motion to musical effect.

### INTERACTION

In principle, it can be played like a classical musical instrument - without having to care for the pitch of the notes. The computer provides the notes of a selected piece, and the player determines exclusively, how this note is articulated: Brush pressure and velocity determine tone dynamics and accentuation, rhythm of movement determines tempo, abruptness of movement determines binding, and vibrato can be achieved through drawing a wiggly line.