



The ixi project started as an experiment with different ways of using the computer to compose and perform music in studio recordings and live performance. The initial idea was to try to create applications that would serve as virtual instruments, rather than general musical studios. In the history of popular music software - tools such as Cubase, Logic, or Protools - we find an approach that is aimed at utilising the computer as a general music studio, following the tradition of the analogue tape studio or the ways music is inscribed in the western notational system. The computer became a virtual studio, but nothing more. There were very few experiments with the real qualities of being able to work with three dimensional space, moving objects or abstract visual metaphors, but more a tendency to imitate the buttons and sliders of analogue equipment. This kind of software is typically considered a linear container of pitch and touch information that is sent to other hardware through MIDI, virtual instruments such as VST, or (when computers became more powerful) a recorder of audio that could store waveform information from real instruments.

The computer becomes a virtual studio, an imitation of the real world, and everybody that has been working with real instruments, mixers and controllers knows how frustrating it is to manipulate with sliders, knobs and buttons on the screen with the mouse, compared to the real thing. This does not mean that the computer is a bad musical instrument. The computer is a vast creative space with unlimited possibilities. So why has the history of computer musical software been so strangely traditional? There are historical reasons for this. In the late 50s, the computer was used as a tool to compose, for example, algorithmic music, where it was utilised for calculating the macrostructure of music, i.e. pitch information. It was only much later that it became powerful enough to handle the wave information of the sound itself, and manipulating or filtering that information through algorithmic procedures. Behind programmes like, Cubase, Logic or Protools, and the audio processing functionalities of those programmes lie decades of hard work when computer scientists, mathematicians and musicians were developing solutions to digitise audio and manipulate its qualities.

It is with much gratitude to people like Max Matthews, Miller S. Puckette and James McCartney (ixi's gurus) that we can explore the computer as a tool and a space for the creation of new virtual musical instruments. Our aim is to explore new forms of interaction with sounds and sonic information. We approach the computer in the same manner as the Luthiers (the instrument makers and musicians of the Middle Ages) approached wood, iron and strings, when most classical instruments we know today were made. In the computer we have a processor that can record sound in real-time, analyse the musical performance and respond according to programmed instructions. It is a truly interactive instrument like the guitar, but offers more sophisticated possibilities through algorithmic procedural instructions. Imagine a guitar that changes shape according to how you play it. Or a guitar that has a different sound each time it is strummed. In our work we have been approaching the computer with open minds, without thinking of the physicality of digitised sound, but rather from the other end; the computer allows us to create unique interfaces that effect musical structure in new ways. An interface is an instrument. It controls how we play, what we compose and the way the music sounds, just like a physical instrument. A cello does not only sound different than a violin, but it is played differently. ixi software is not a generalised sound studio nor a 'solution', but a virtual instrument that helps you to automate musical processes and set the conditions of composition. The instrument can operate automatically until further intervention from the musician.

Each ixi application is a limited instrument. You might not get it to do what you have in mind, (other software is better for that) but you will be amused with the creative possibilities of, for example, Spindrum or Virus. The software can work as a catalyst, producing different patterns and soundscapes which can be recorded and used in compositions, play or live performance. We use as much immediacy as possible in our work. Instead of controllers like knobs and sliders, we work with visual objects that rotate, move or connect; instead of linear looping in a timeline we work with circularity, which encourages the creation of polyrhythms and unexpected sound collages.