## Koan Early History

## Tim Cole

In 1986 Tim Cole had the idea for what would become Koan. It was a handheld device that would generate subtle and continuous, ever-changing "context sensitive" music, either under the direct control of an artist and/or responding to environmental inputs.

In 1990 Tim, joined by Jon Pettigrew, founded SSEYO. Peter Cole, the Koan Music Engine architect, joined the company as Technical Director during its first year. The crucial component turned out to be the real-time "content engine" that would need to collate the inputs and create an integrated and coherent output. Hence arose the Koan Music Engine (an "integrator"), which, from sets of rules and parameters, created continuously generated music (generative music). As Koan was a real-time music engine that could additionally be externally directed, it was also capable of generating music that was continually morphing from one space / shape to the next, an extra behaviour which SSEYO termed "intermorphic".

By 1994 SSEYO had started trading with the release of the Koan music player "Koan Plus", soon followed by the first version of Koan Pro in 1995. By 1996 Koan had become the first European-developed plugin for Netscape and SSEYO had published Brian Eno's seminal *Generative Music 1*, and Tim Didymus' *Float*.

From 1996-2000, SSEYO was heavily influenced by developments in the Internet and browsers. SSEYO's goal was to open up access to the Koan system so that webpage designers and developers could create their own tools and applications. Through the auspices of the (even today) free Koan Plugin and a comprehensive JavaScript API, it became a highly programmable music engine that could be used in webpages, could drive animations and even be controlled by Flash. Over this period SSEYO also attempted to move away from the limitations of MIDI sound palettes on computer soundcards, so it developed its own integrated modular software synthesiser and a text-based parameter format called "Vector Audio."

From 2000 to 2002, SSEYO's primary focus was in developing audio frameworks for mobile devices, to provide the necessary foundation for an open environment for music engines and sound generators.

Following a successful merger with Tao Group in 2002, and the integration of its audio technologies and frameworks into the intent Sound System (announced July 2003), the original dream is close to fruition!

Many artists today are developing their own music systems and software, a challenging task indeed. From the first release of Koan Pro in 1995, it has always been SSEYO's goal to create platforms, tools and players that could be used and enjoyed by the public, musicians and music software developers. Ultimately, to do this properly, it realised it had to create an open platform which others could extend, and this meant getting into an Operating System. The new intent Sound System (iSS) is now the culmination of many years of work to this end. It is an open, cross-language, cross-platform high performance audio framework for mobile devices to desktops. The comprehensive iSS is easily

extendable, allowing music software developers to add their own audio components, FX, modular synthesisers and music engines (written in C, C++, Java or Virtual Processor). The full power of the iSS can be accessed through the intent browser Qi, so it is easy to build tool front ends with DHTML, HTML, XML and JavaScript. And, just for completeness, Koan now runs on intent, too!

Tao Group: http://www.tao-group.com SSEYO: http://www.sseyo.com

intent Sound System (iSS):
http://withintent.biz/index2.php?Cat=4&AntX=67
iSS Technical documentation:
http://www.sseva.com/tag.graun/aya/iss/ani.htm

http://www.sseyo.com/tao\_group/ave/iss/api.html Koan Generative Music Engine:

http://www.sseyo.com/koan/koanVectorAudio\_GenerativeMusic.html