Andrew Garton is currently completing a Master of Arts (Animation and Interactive Media), RMIT.

Sound Bytes

One million, eight hundred

Popular music has always been the starting point for revolutionary developments in music technology. Now, with digital communications and multimedia becoming commonplace words, the direction of music is radically changing.

Since the 1600s, people have been using elements of chance in musical composition. A popular parlour game of the time composed a piece of music on the roll of dice and a rule book of harmonies. The game was based on algorithms – a step by step system for producing a known outcome.

With twentieth century technology, music has entered a period of experimentation. Today, sound artists are turning to mathematical theory for inspiration. Composers are running algorithmic patterns, more elaborate than those of the parlour game, to produce 'generative music'. This involves feeding back complex chaotic and fractal theories to produce a continuous evolution of sound.
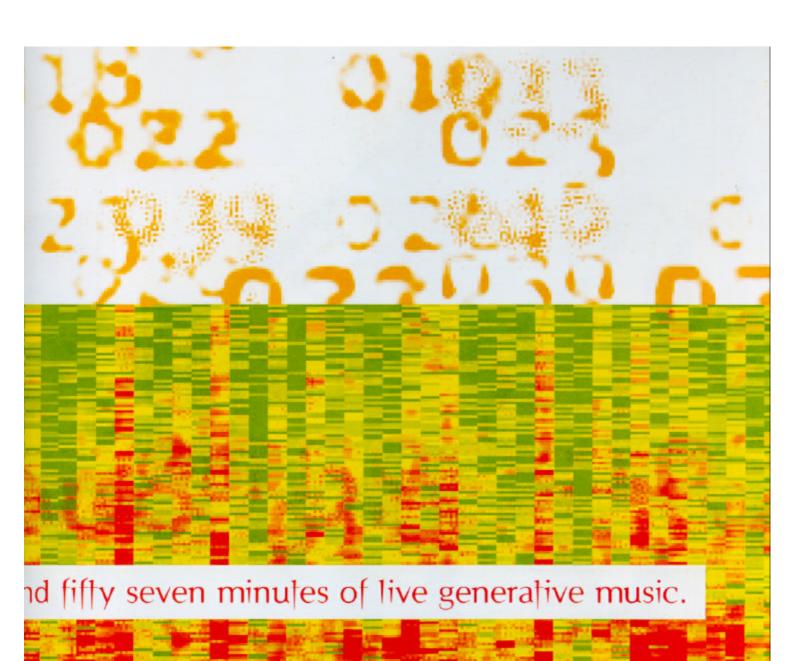
Digital artist, Andrew Garton, has been inspired by this medium. He is using the Internet, radio and live perfomance of generative sound to explore the dynamics of music.

Garton's recent work, 'Sensorium', is described as one million, eight hundred and fifty-seven minutes of live generative music, consisting of sounds sampled from performances by Stelarc, a Melbourne-based performance artist.

His latest project, presented in September this year, was a web installation and performance commissioned by Austria's Kunstradio (Art Radio). In addition to his innovative work with Australian and Austrian radio, Garton and his colleagues are pushing the boundaries of sound design with their multimedia production house, Toy Satellite.

The initial concept of generative music is related to the parlour game, but the final sound is as complex and mysterious as the mathematics that created it. Unlike popular music to which we are accustomed, the sound is continual, expanding to become a

...nd fifty seven minutes of live generative music.

total sound environment. While the mutation pattern can be predicted, the final sound cannot.

Garton's work has attracted significant support away from Australia. Arts Electronica in Austria will host another of his projects at its festival in Linz, and will provide an artist to work on his interactive opera, 'Auslander und Staatenlose'. In the United States, a Virginian gallery is including a selection from 'Sensorium' as part of an installation.

For a sample of his sound design, visit Andrew Garton's website at:
www.toysatellite.com.au/agarton/

Or the ABC Listening Room website at:
http://www.abc.net.au/arts/lroom/sensorium/