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Having fun with mathematics and music

Review **Concert**

CANONIC OFFERINGS
Yong Siew Toh Conservatory Concert Hall/Last Saturday

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Canonic Offerings was a concert and part of Mathemusical Conversations, an international workshop on music and mathematics organised by the National University of Singapore's Institute of Mathematical Sciences and Yong Siew Toh Conservatory.

For centuries, mankind has pondered on and celebrated the intimate relationship between the two subjects and this concert provided a brief glimpse of what happens when both are united in harmony and time.

Music is essentially a sequence of notes, frequencies and silences conducted over the passage of time. It is the variables of these parameters which give music its meaning, making it interesting for listeners, the end-users of seemingly complex formulae.

The canon, with notes played over a repeated rhythmic pattern of fixed durations, is one of the foundations of musical form.

Anyone who has sung Three Blind Mice or Row, Row Your Boat will understand how it works.

American composer Clifton Callender's Canonic Offerings presented a series of 10 short canons each of different time signatures for string quartet, which was an ideal medium as the four voices could operate in unison or independently while staying perfectly in time.

Being fiendishly difficult to coordinate was part of the equation and the members of T'ang Quartet were aided with ear pieces which provided the beats that sometimes accelerated wildly or slowed down to stasis as called for in the score.

Although mathematical in conception, the tonal idiom and skilful employment of counterpoint made it a quite pleasant listen.

The foursome were joined by Australian pianist Jacob Abela for the world premiere of American Dmitri Tymoczko's S Sensation Something, which took on a more visceral approach to the subject.

The slow opening with two violins gradually joined by other voices was canonic – it almost resembled Pachelbel's ubiquitous Canon but soon took on a life of its own by shifting and playing around with the rules.

Its fast central section ambled from lively to violent but the underlying pulse was never lost in the process, winding down for a fairy-tale world of glimmering textures and a quiet close.

Was there a programme or story to the music's fantastical imagery? This was where mathematics could be made to resound with palpably human emotions.

Johann Sebastian Bach might be considered the grandfather of mathematics in music. His Goldberg Variations, originally composed for one keyboard, comprised an Aria, 30 variations (on the left hand sequence of the theme rather than its melody) and bookended by a reprise of the Aria. Every third variation is a canon based on different intervals.

Australian don Stephen Emmerson's transcription of the variations spread the work between two performers on two pianos in a neat division of labour. With each pianist having less to play, there was scope for enhancing the harmonies and discreetly adding counter-melodies.

The basic architecture being kept intact, there was little fear of blowing the work out of proportion in this fun experiment.

Pianists Emmerson and Bernard Lanskey, head of the conservatory, clearly enjoyed their tasks at hand and there was much humour in their interplay and exchanges in leading the melodies. Even if some of the variations did not go neatly as planned, it was the keen musicianship that won the day.

By Variation No. 30, a cheeky Quodlibet that mashes up trite Teutonic tunes of the day, and the Aria's return, a breezy voyage of harmonic exploration had transpired.

Cerebral or otherwise, it was not a bad way to spend an evening with a loved one on Valentine's Day.