

Astra concert 6 in VOICES MULTIPLE AND COMMUNAL
Sunday 10 September, 5 pm
Artistic Director: John McCaughey
Program note

Greg Schiemer, Transposed Dekany (2017)

A former teacher and researcher at the NSW Conservatorium and the University of Wollongong, Greg Schiemer has spent many years inventing and building new instruments in the electro-acoustic domain, devising accessible ways for them to be played by groups of people, and exploring microtonal tunings which release new sounds and harmonies. All these factors come together in his piece for multiple iPhones, with its 10-note scale (dekany) and its unusual sound-sources, finally put to work for productive purposes.

The composer writes: “Transposed Dekany is a work for players to explore the musical properties of a microtonal scale where pitches are not available on standard instruments. The work is designed as a bridge into the world of microtonality for concert musicians whose perceptual frameworks have developed over a lifetime of training based on traditional tuning. The piece lasts 12:24” and uses a 10-note scale called a dekany which is generated from harmonics, using a method devised by contemporary tuning theorist Erv Wilson. A salient property of the dekany used in Transposed Dekany is that the ten pitches also form two recognisably pentatonic scales, one on the odd numbered notes of the dekany, the other on the even notes.

The work calls for a large musical consort organised into five families of instruments. Each family is tuned to a different scale transposition. Unlike transposition in the familiar equal tempered system, here transposition introduces new pitches that lie outside the original set of ten pitches, a consequence of the dekany having pitches that are not equally spaced. When two or more transposed families play simultaneously this results in microtonal timbres that are a by product of tuning. Tuning is not simply a matter of melody and harmony but timbre.

Transposed Dekany owes a debt to tuning theorist and instrument-builder Erv Wilson, and composer and computer music pioneer, Jean-Claude Risset. Other builders of bespoke instruments in the twenty first century should be encouraged by Wilson’s work on tuning. Not only does it provide a system of keyboard mapping that brings a broader historical perspective to the visionary work of Partch, it offers pathways for the future of music that are potentially linked with tuning ideas from antiquity. One example is Wilson’s Scales of Mt Meru which extend theories of the Hindu mathematician Pingala whose work predates not only Pascal’s triangle but early music theorists of ancient Greece by several millennia.

And as future generations grow tired of the current ideological discourse on music – preoccupied as it is with post-modernism, and by implication modernism – they will recognise the significance of the work of Risset, a composer who created the first software instruments. Would there be a twentieth century composer whose work at any musical coal face has had more impact on the future of music? Bell sounds and chorus sounds heard in Transposed Dekany are based on instruments from his catalogue of software instruments developed at Bell Labs during the 1960s. Transposed Dekany is dedicated to the memory of these two musical giants who died in November 2016 just a few days apart.”