

Gamelan

Indian(esian) oceans of sound

Twenty-first century Gamelan generator, **Mark Lockett**, mixed up algorithmic software, his Gamelan Loop Ensemble, and the art of story-telling for a performance at Birmingham's Ikon Gallery last year, as he tells **Ruth Hellier-Tinoco**

Steady-state story simulations

'HOW DO YOU FIND new ways of exploring a medium while also acknowledging its essential character?'¹. The Balinese gamelan ensemble is the medium in question for composer and musician Mark Lockett, who gives it a central role in two of his most recent compositions, *The Loop Orchestra* and *The Dancing Pig*. Interlocking patterns, cyclical structures, long melodic lines punctuated by gongs are still in evidence, but computer-controlled and generated sounds mingle, blend and elide with the ancient timbres of the gamelan.

Visualise white spaces filled with sonic vibrations and reverberations – all senses are being touched and moved to evoke an aural, visual and kinaesthetic, sensuous experience.

In a lower gallery, live musicians strike the heavy iron keys of the ancient Balinese gamelan *salunding* with wooden mallets and hammers; depress plastic keys on a contemporary synthesiser; pluck metal strings on a treated electric bass guitar; strike cymbals and gongs; jangle Indian bells on a plastic board.

In an upper gallery, the music resonates, but no musicians are present. Here loudspeakers stand proud and tweeters hang suspended – star-like, emitting a version of the live music, processed by KOAN, a powerful computer programme for manipulating and diffusing sound.

Back in the lower gallery music emanates from loudspeakers. A recording of the whole composition, piece by piece, is transmitted in 'random' versions, generated by the computer, inviting improvised responses from the live musicians. Now – wander through the spaces – pause – lean – amble – sit – meander – lounge – meditate.

The Loop Orchestra is not a piece but an installation and experience, composed with a specific space and time in mind. The space: the Ikon Gallery, a converted school building in the heart

of rejuvenated Birmingham. The time: eight hours on a September weekend, from mid-day until eight o'clock, on each day. Both space and time evolved gradually as the performance progressed – day turning to night, and light turning to dark, transforming the ambience of the space. So too the music was metamorphosed, transforming tempos, textures and timbres, modifying moods and motifs, shifting shapes and structures.

Central to the sonic experience is the gamelan, a musical ensemble of the Indonesian archipelago, often of purely percussion instruments. Such ensembles exist in many forms and are used for a range of roles from classical dance-drama to religious ceremonies to popular entertainment to 'fillers' in between radio programmes. The principal instruments are various sized metallophones and gongs, played by being struck with hammers and mallets. The Loop Orchestra uses the seven-tone gamelan *salunding* from Bali, which is distinguished from all other Balinese ensembles by its tone, design, tuning and material, and by its extremely sacred connotations for the Bali Aga communities. Both music and instruments are invested with supernatural power, a tradition perpetuated through a hierarchy of closed and secretive organisations. The basic design of the instruments is simple – large oblong keys, cast from iron, are suspended over low hollowed-out trough resonators played with club-shaped mallets using an intricate two-hand technique. Damping is an integral part of the playing technique as the keys ring for a long time. Each instrument holds eight keys, whose tuning forms an overlapping scale which spreads over the entire ensemble from the lowest to the highest notes: 56717123, 23454567, 12345671, 71234567 and 23456712. Pitch, however, is an aesthetic phenomenon rather than a scientific one. Instruments in the higher register perform short, rapid phrases, while the bass notes of the gongs punctuate the melodic lines. This music is also characterised by a steady speed and dynamics, highly complex interlocking figurations and heterophonic parts, and a varied tonality, using six separate modes or *saihs* within the heptatonic scale. For Mark, the potentially never-ending cyclic nature of gamelan, a steady state not bound by beginnings,

endings or duration, is a fascination, along with the emphasis upon textural aspects.

'Loop Orchestra arose because I had this idea for a piece lasting a long time, in an empty gallery and I talked about it with Jonathan (Watkins, the director of the Ikon gallery), that it would be nice to have the gallery stripped down. He agreed that it would be great because one of the things he'd been wanting to do was to take all the paint off the floors in the Ikon; they've got concrete floors and they were painted sort of concrete grey. What's the point of having concrete painted like concrete?! So we had all the paint stripped off the floors, nothing on the walls, all the partitions that are often or normally there for exhibitions, they were taken out, all the window blockings taken out – it was stripped back to the bare building.'

Into this cleansed space *The Loop Orchestra* was installed. The Ikon gallery was transformed, perhaps purified, and filled with a visual, sonic and kinaesthetic experience not generally associated with an 'art' gallery – musical instruments, electronic amplification apparatus, a computer *and musical sounds*. In some of the isolated mountain villages in Bali the gamelan *salunding* is used to invoke deities and appease earth demons ('*Salu*' = holy place, '*nding*' = to cleanse or purify), so too Mark's intention was to provide the spatial and sonic environment for a spiritual experience involving extended time: 'It doesn't have any particular beginning or ending, it's just there – I do think of it as a spiritual thing; the music is there whether the people listen to it or not – if there wasn't an audience it's not a measure of its success – this is indulgent because you want to generate money, but on another level, it's making an artistic statement. *Loop Orchestra* is spiritual – I wanted it to be a slightly perception-changing experience – the amount of time that it takes up is part of that.'

The Loop Orchestra was meant to be a kind of sonic experience that you could come in and out of and walk around, like sound architecture; sounds are different in different spaces according to where you are, like physical architecture designed to make use of that space, all around us.'

The Loop Orchestra consists of 16 distinct but open-ended pieces, each between 20 and 40 minutes in duration, which can be put together in a random sequence, using a Cagean chance procedure, such as the I Ching, thus there is no pre-destined beginning and end, no compositional structural devices overlaying the whole performance that mark the developments, climaxes and troughs. Such compositional devices are unnecessary when the unity of the experience lies in the continuity of sound and the diversity of mood, texture, timbre, structure, harmony, melody in each piece. Mark's interest in chance and numerical games led him to entitle each piece with a four-letter word (AMOK,

KEVA, AZUL) the first and last letters of which link to another title, creating a cyclic loop of letters, each of which has a numerical value which corresponded to the I Ching hexagrams. (Where does the IKON gallery, the KORG synthesiser and the KOAN computer programme fit into all this?)

'Cycles and loops are not only intrinsically part of the sonic experience, but are fundamental to the spatial



experience. Jonathan dropped this thing – "what are you going to do about the fact that there're two floors in the gallery?" – which started me thinking along a whole different track – I actually made use of the fact that there're two levels, which is why it was called *The Loop Orchestra*, because I had this idea of the music being fed up to the upper gallery and this being fed back down again to interact with the live music – so it was a continuous thing.'

Electronics are therefore integral to the event, as is the interaction between live and electronic music. 'Well, I'm interested in the possibilities of that technology, so, for example, the KOAN programme generates music according to the compositional principles and parameters that you give it; it's a way of filling the space; you