

Listen to the view

If everything communicated with music you could close your eyes and listen to the view.

The VOS system makes this possible by converting visual data to music.

Audio commentaries and demonstrations of the system feature at the listening post, together with the Seeker motor racing simulation.

VOS

The VOS system converts visual data by assigning a unique melody to represent each item in a three dimensional space.

Standardised melodic features indicate characteristics of each item. For example, melodies representing inanimate items involve one or two notes, whereas animate items are represented with melodies of three notes or more.

The melodies are arranged to integrate with one another, and each melody is played on a different instrument so they are readily identifiable.

Instruments are selected according to the colour of the item they are assigned to represent. For example, red items are indicated with a trumpet and yellow items with a piano.

A combination of volume, octave and stereo positioning is used to place each melody in three dimensional space corresponding with the item they represent.

Volume indicates proximity, so a melody is played at a loud volume when you are close to the item it represents and quietly when far away.

Octave indicates height. A melody is played at a high octave when the item it represents is high above you, and lower octaves descending to the floor.

Stereo positioning indicates whether items are to your right, left or some intermediate point in front of you. VOS pieces must be played through stereo equipment for this reason.

Percussion indicates hazards, terrain features and velocity, bass indicates safe passage between items and duplication indicates their size.

You can therefore recognise multiple items, their characteristics, their size and position in three dimensional space, safe passage between them, hazards and terrain features as though you see them.

Seeker

Seeker is a 6.5 minute motor racing simulation modelling 4 laps of the raceway at Laguna Seca in California.

Lap 1 introduces the track, opening with the left edge as a celeste and right edge as a harp. Percussion organ, digital tines, electric piano and guitar build up around you, representing barriers, grandstands, overbridges and the pit lane facility.

The lap begins when digital bells sound for the start/finish line.

You travel downhill and left at turn 1 into left turn 2, where chiffer bells, saxophone and flute represent rumble strips, sand and grass runoff areas.

Right turns 3 and 4 lead to an incline through left turns 5 and 6 until turn 7.

You plummet down the turn 8 corkscrew just after the easy right at turn 7.

The corners then become progressively tighter as you switch left, right and left again from turns 9 through 11 and arrive on the finishing straight.

Velocity is mapped with a bass drum on lap 2, and a race car is introduced between turns 10 and 11.

The bass drum features on each beat up to 50mph, every half beat from 51 to 100mph and every quarter beat over 101mph.

Velocity mapping is swapped for terrain mapping on lap 3, with bells and cymbals featuring as grassy and sandy surfaces in the runoff areas at turns 2 and 10.

Muted percussion otherwise features as the smooth track surface.

Low congas indicate declines from turn 1 to turn 2 and at turn 8, whereas high congas indicate the incline from turn 5 to turn 7.

Snares indicate fixed hazards, overlaying the barriers at the start/finish straight, the straight between turns 4 and 5, and at turn 8.

Other race cars are introduced on lap 3: Cars 2 and 3 join the track from the pit lane after turn 2; car 4 between turns 5 and 6; and car 5 on the finishing straight.

Lap 4 combines velocity and terrain mapping as well as introducing car 6 between turns 4 and 5.

Please see the booklet on this work or visit www.VOSsystem.net for more.

Martin Dillon