

Motion Capture Centre

The design is organised around two principal spaces: a motion capture arena and an aquatic motion capture vessel. A unifying structure sweeps through the entire building, forming an intricate series of vertebrae. The spaces exploit and extend the potential of the dome, forming a dome/anti-dome structure. Rigs for sensors, cameras and lights circle the arena space, and are integral to the structure of the building. The field in which motion sensing takes place operates with three reference planes, not just two. The design anticipates the potential of aquatic motion capture (sea creatures, plants, human bodies, fluids, particles and submarine artefacts). The pool has transparent walls suspended on steel trusses, and invites on-lookers. The design is not restricted to the activity of motion capture as currently understood, but rather informs and expresses its potential.

Reasons for the nomination:

The design effectively explores major characteristics of the 3D modelling tools, form-making, transformation, and repetition, and the complex junctions that can result. The design is bold and fantastical, yet grounded in a plausible interpretation of the program, and a consideration of site context. Aquatic motion capture is an unexplored area. The suggestion of a suspended vessel-like building that supplements the usual above-ground dome is intriguing. The geometrical intricacies of resolving the meeting of these two structures produces a knotted truss structure. At one level the design is about modelling the knot, the complex join between two radial forms, an exercise that would perhaps only be contemplated with computer modelling as a design medium.



ARCHITECTURAL DESIGN

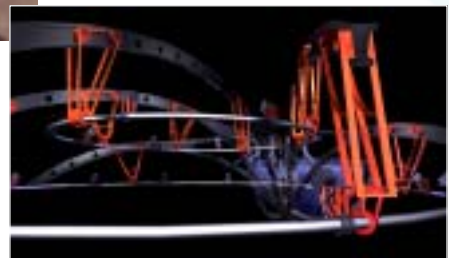
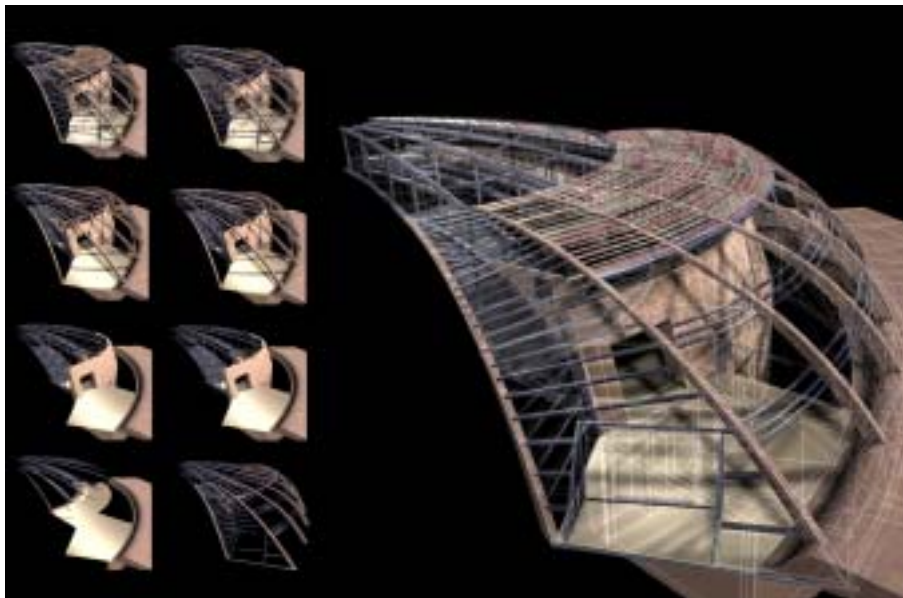
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Advisor/Instructor: **Professor Richard Coyne**
School of Arts, Culture and Environment



Jury Comments:

The project for the motion capture studio was impressive not only for its splendid graphics, but for the careful consideration of structure and circulation within its spaces. I was very taken with the idea of motion capture as a theme for a design project and found the matter of circulation was particularly appropriate. It would be enticing to take this project further and actually incorporate the results of motion studies within the configuration of the project. This comment, of course, goes beyond the present proposal but is still within reach if the project were to be developed further. A very stimulating proposal!

- Peter Anders

Award of Distinction