

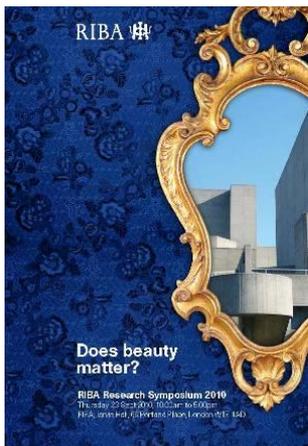
Welcome to IDBE 17

The biggest IDBE group ever started the course this year, with twenty seven students arriving in Cambridge on the 19th September from places as far afield as Australia, South Africa, Saudi Arabia, the United States, Malaysia, Greece, Spain – and even the Isle of Wight!



They were welcomed at Wolfson College on Sunday, matriculating on Tuesday when they were formally received as members of the university and of the college.

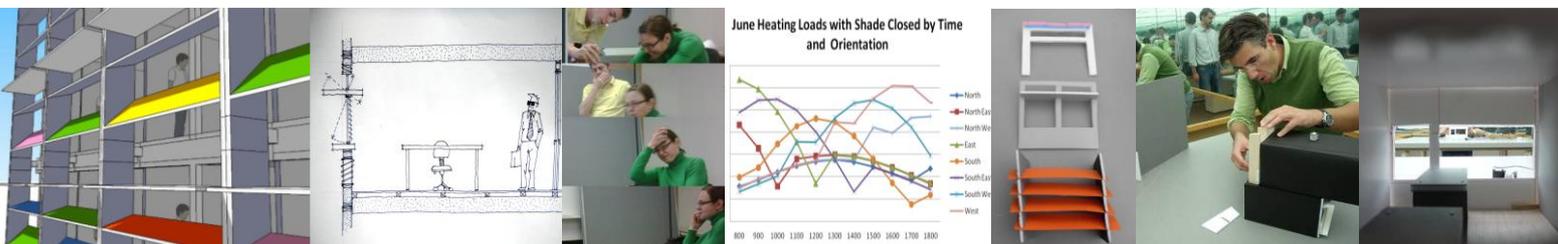
Does beauty matter?



Beauty, as ‘both a universal good and an enduring source of controversy’, was the subject debated at the Royal Institute of British Architects at their annual research symposium on the 23rd September. Cohort 17 attended the symposium in London during the course week with Sebastian Macmillan, who also chairs the RIBA research and development committee.

Studio project – facade design

The studio brief was set by Dr Nick Baker from the Martin Centre, an expert in daylighting in buildings. The teams built models of their conceptual designs to test in the artificial sky, and presented their solutions (shown below) to Dr Overend, a specialist in glass and facade design.



Professor Jacques Heyman and the plastic analysis of medieval stone fan vaults

The IDBE course was honoured to have a presentation by Professor Jacques Heyman, the originator of the application of plastic theory to masonry structures. Professor Heyman held his audience entranced by the gripping mystery of the displacement of a quatrefoil in the fan vault at Henry VII Lady Chapel at Westminster Abbey, describing in beautifully clear and simple diagrams the structural behavior first of simple masonry arches and then of complex medieval fan vaults.



Professor Heyman was head of the department of engineering at Cambridge from 1983 to 1992. For those of us who were inspired by his lecture and avid for more, his book *The Stone Skeleton* (CUP, 1995) discusses the analysis of stone structures in more detail.

Architecture of Cambridge

As part of the introductory week the IDBE students were taken on a professional walking tour of the buildings of Cambridge. This was followed by a lecture from Nick Ray, a practising architect who has designed buildings for several of the colleges in Cambridge, as well as being a Reader Emeritus and long term lecturer at the Architecture Department. Considering the architecture of Cambridge as an illustration of many of the issues which continue to confront designers, Nick described five different approaches: as above-ground archaeologists, in terms of spatial sequence, as a sequence of styles, as demonstrations of technology, and finally as symbols of the collective life that is lived.

Where are they now?

**Clive Fussell (IDBE 6) and Paul Grimes (IDBE 11),
founding directors of **engenuiti****



Paul Grimes started his career working on the engineering design of major civil engineering projects including ports and bridges then moved into the engineering and design of buildings and specifically structural engineering. He has worked on all scales of building projects over the past 15 years and during that time became interested in the ideas behind “Total Design” as proposed by Ove Arup.

The IDBE programme was suggested whilst he was working for Price & Myers. He remembers the IDBE as a time of fascinating discussion, intense creativity and a wonderful opportunity to explore new ideas with other professionals who were “right in the thick of it” in the real world. He is a great believer that engineering is as much about “making things happen” as about technical excellence.

Clive Fussell developed an interest in multi-disciplinary design through IDBE and projects such as the BBC Media village at White City, and was able to utilise this knowledge by project leading the engineering disciplines of a number of award winning projects with leading architectural practices. This culminated in leading the delivery of the engineering design for the four new stations on the Haramain high speed railway between Makkah and Madinah.

Common to the success of these projects is effective communication within the design team and a willingness to explore new ideas. It was with these principles in mind that Clive and Paul decided in Summer 2010 to form engenuiti with Nathan Wheatley (shown with Clive and Paul in the photograph).

Goodbye and good luck to Julie Jupp...

...who has returned to her native city of Sydney as a Senior Lecturer at the University of Technology. Julie was the assistant director of the IDBE course for two years, and we wish her every success in her future career.

...and an introduction to her replacement

...Alice Moncaster, who joined IDBE as Deputy Director in October 2010. Alice is a graduate of the Engineering Department, and worked for several years as a geotechnical and structural consulting engineer before returning to academia in 2007. She is now completing an interdisciplinary PhD at UEA, and is also a part-time researcher in the Centre for Sustainable Development.



Thank you to the outgoing Advisory Committee

For the past nine years the IDBE course has benefitted from the wealth of experience and knowledge of an advisory committee composed of industry leaders and academics from the Departments of Engineering and Architecture, who have given their very valuable time with great generosity and good will to help steer the course. We were delighted to be able to invite some of them to a meal in the Saltmarsh Room at Kings College on 4th November to thank them.

Shown above from left to right are: Max Fordham (Max Fordham LLP), Alice Moncaster (IDBE), Allan McRobie (Engineering), Becky Stanley (IDBE), Sebastian Macmillan (IDBE Course Director), Ian Liddell (Buro Happold), Richard Haryott (Ove Arup Foundation), Sam Price (Price and Myers), Peter Carolin (former Professor of Architecture) and Chris Burgoyne (Engineering).

A new larger Advisory Panel has now been set up, with its first meeting scheduled for December.



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