The definitive account of Balmond’s investigative approach to structural engineering

“informal has a typographic elegance that makes it look like no previous engineering book…its glimpses of a hidden order of things, of the occult properties of numbers and shapes, suggest it could be the next Brief History of Time – but with pictures“
Deyan Sudjic, The Observer

“Balmond has, almost single-handedly, shifted the ground in engineering – a domain where the earth moves very rarely – and therefore enabled architecture to be imagined differently.“
Rem Koolhaas
the book’s thesis

The world is changing in social values and its institutions, there is also a breakdown in fixed ideologies – a more fluid and informal approach is called for. Hierarchies and dogma are being replaced by interdependence, self help and improvisation are concepts now proposed as new principles of organisation. Informal anticipates this in the design of buildings. Ideas such as local, hybrid and juxtaposition are taken as providing start points for design in the interrogation of space, and architecture is viewed as a formative process arising out of a seminal structural logic. Instead of dumb skeleton there is network – a connective patch through pattern.

The book invites the reader to enter the dialogues between the author and the architects he works with, sharing the intimacies of the design process through sketches and first principles.

Projects range from a Villa in Bordeaux to a large Transport Interchange in Arnhem, from a large canopy in Lisbon to the V&A Spiral in London and an Exhibition Centre in Lille, highlighting the collaborations Cecil Balmond has had with the architects Ben van Berkel, Daniel Libeskind, Rem Koolhaas, Alvaro Siza and Peter Kulka with Ulrich Königs. What is constant is a search for the magic in making a form, using numbers, music and mathematics as vital sources. What comes through ultimately is that the lyric or elegiac is always present, even in that hardest of pursuits to make a building take shape, defy gravity and be pragmatic. Informal captures this essence that beyond craft and technique there is art and poetry.

Translation of these ideas into tangible book form involved cultural historian and critic Christian Brensing, who acted as the editor and introduced Balmond to Michele Jannuzzi and Richard Smith. They in turn provided a seamless innovation of text and image adding to the content another kind of potent structure.
the book’s creation

“I was introduced to Michele Jannuzzi and Richard Smith” Balmond says, “as people who would help me resolve a difficult problem – how to communicate the essence of something.” The resulting collaboration – a seamless innovation of text and image – mirrors Balmond’s own creative collaboration with leading architects, a blurring of the boundaries between one discipline and another.

The book presents Balmond’s unorthodox ideas through a series of interlinking stories. This approach enables each story (or chapter) to focus on a particular aspect of Balmond’s problem-solving methodology without replicating the already well-documented perspective of the architects on each of these iconic projects.

Stories relating to each project are dispersed throughout the book, each free to graphically explore its own theme. Counterpoint comes from placing different projects alongside each other. Pace, tone and emphasis vary to suit content. Design is inspired more by mathematics books and children’s fiction than by books on architecture or engineering.

The production question was how best to reconcile editorial and design intentions with the publisher’s initial assumptions – the answers helped to define the book as an object. The standard components of a medium format book of 200 pages printed mostly in two colours (the publisher’s initial assumption) were dissected and reconfigured to produce a 400 page book the size of a novel. Some sections employ just one colour, giving opportunity for others to have three or four.

Each project has a ‘signature’ colour, thereby visually reuniting the different stories. The contents page and cover map the rest of the book using these colours.

Underpinning the whole is a typographic treatment designed to relay the simple elegance of Balmond’s ideas, and to retain the flow of words and doodles of his hand-written manuscripts. Conventional left, right or centred text settings were abandoned in favour of an ‘internal alignment’. This allows drawings, photographs and documents to be interwoven, and softens the hard right angles of the book.

Informal has received an award from Stiftung Buchkunst as one of “Die schönsten deutschen Bücher 2002.”
the book’s projects

The ideas set out in the book are explained through 7 seminal projects that Balmond worked on in collaboration with architects Rem Koolhaas (OMA), Daniel Libeskind, Alvaro Siza, Ben van Berkel (UN studio), and Peter Kulka with Ulrich Königs.

“The idea of a table is destroyed. Instead, the dynamic is launch.”
Villa Floriac, Bordeaux: diary of making a box ‘fly’

“Let the informal in. Have a syncopation instead of the dull metronomic one-two repeat of post and beam.”
Kunsthal, Rotterdam: breaking the Cartesian cage
“We wanted something different, eccentric orbits, a release of the wild energies that Nature seems so easily to control.”

Sports Stadium, Chemnitz: algorithm versus mimesis

“It was essentially a one storey, shed-like building. But what a shed it turned out to be.”

Congrexpoc, Lille: city within city
“Does space have to be container-like and neutered to house works of art?”

V&A Spiral, London: animated geometries

“The mystery is in the unseen calculation of exact balance, of up versus down.”

Portuguese National Pavilion, Lisbon: structure as a cut in space
“Layering and folding take over and the concerns of a Newtonian mechanics fall away.”

Central Station, Arnhem: flow diagram as enzyme
Cecil Balmond (above left)

Cecil Balmond is an engineer, designer, master builder, mathematician, thinker and writer. His theory of the informal is grounded in his collaboration over the last 25 years with many notable architects including Rem Koolhaas, Daniel Libeskind and Alvaro Siza. Charles Jencks remarked, when asked to list the fifteen most important buildings and projects that were changing architecture, that “to my amazement, Balmond scores higher than any architect, if the engineer is credited with partial creation”. Balmond’s recent projects include the Serpentine Gallery Pavilion with Toyo Ito, and the largest fabric sculpture in the world with Anish Kapoor, recently opened in the Turbine Hall at Tate Modern.

Balmond was born in Sri Lanka, where he studied at university, before leaving for further education in England. His interest lies in the genesis of form and the overlap of science with art, using music, numbers and mathematics as vital sources. He is Saarinen Professor at Yale, was Kenzo Tange Visiting Critic at Harvard, is a member of the Arup Group Board, and Chairman of Arup’s Europe Division. He was recently appointed a Fellow of the RIBA and was awarded the honorary Diploma of the AA. He lives in London.

Balmond’s first book Number 9: the Search for the Sigma Code was also published by Prestel (1998).

Michele Jannuzzi and Richard Smith (above centre and right)

Michele Jannuzzi and Richard Smith are the directors of cross-media design consultants Jannuzzi Smith and authors of dotlinepixel published by GCE, Mendrisio (2000). They are graduates of the Royal College of Art in London.

Recent projects include the design and production of Central Saint Martins College of Art and Design course information (online and printed) and work for Royal Mail on the special stamps programme. Besides printed material they have many web oriented projects, including a suite of online design and marketing content and applications for Sainsbury’s.

They have judged on a number of the most prestigious design awards, and are regular speakers at business conferences and academic institutions (including Royal college of Art, Central Saint Martins College of Art and Design, Università della Svizzera Italiana).
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Additional material and downloadable images from the book are available at www.theinformal.com