

Books

- 1990 *Structural Engineering. The Nature of Theory and Design*, Ellis Horwood, Chichester 1990.
- 1994 *The Art of the Structural Engineer*, Artemis, London 1994.
- 1997 *Happold: The Confidence to Build* (with D. Walker), Happold Trust Publications, Bath 1997.
- 1999 *Happold: the Confidence to Build* (with D. Walker), Spon, London 1998.
Structural and Civil Engineering Design, Vol.12 of the series "Studies in the History of Civil Engineering". Aldershot: Ashgate (Variorum), 1999.
- 2001 *Creativity and Innovation: the Structural Engineer's Contribution to Design*, Architectural Press, Oxford 2001.
- 2006 *Proceedings of the Second International Congress on Construction History (Cambridge)* (with M. Dunkeld, J.Campbell, H. Louw, M. Tutton, C. Powell, R. Thorne (eds.)), Construction History Society, 3 Vols. 3, 2006.
- 2007 *Building: 3000 years of Design, Engineering and Construction*, Phaidon, London & New York 2007.

Book chapters

- 1996 *Construction Engineering* (with M. Bussell), in K. Mildren, P. Hicks (eds.). *Information Sources in Engineering*, Bowker Saur, London 1996, pp. 519-545.
Structural Engineering (with M. Bussell), in K. Mildren, P. Hicks (eds.). *Information Sources in Engineering*, Bowker Saur, London 1996, pp. 547-568.
- 1997 *Concrete and steel in twentieth-century construction: from experimentation to mainstream usage*, in M. Stratton (ed.), in *Structure and Style*, Spon, London 1997, pp. 103-142..
- 1999 *Mills and warehouses in 19th-century England*, in *Study Guide 2: European Cities since the Industrial Revolution*, Open University, Milton Keynes 1999. Pages 8-18.
Steel and concrete-framed buildings in 20th-century England, in *Study Guide 2: European Cities since the Industrial Revolution*, Open University, Milton Keynes 1999, pp. 45-56.
- 2003 *Key Developments in the History of Concrete Construction and the Implications for Remediation and Repair*, in S. MacDonald (ed.), *Building: Pathology: Concrete*, Blackwell Science, Oxford 2003, Chapter 2, pages 15-105.
- 2004 *Report on the State of Construction History in Britain*, in A. Becchi, M. Corradi, F. Focè, O. Pedemonte (eds.), *Construction History: Research perspectives in Europe*, Kim Williams Books, Firenze 2004, pp. 11-21.
- 2005 *A history of using models to inform the design of structures*, in S. Huerta (ed.), *Essays in the History of Theory of Structures*, Instituto Juan de Herrera, Madrid 2005, pp. 9-44.

Monographs

- 1989 *The Engineers' Contribution to Contemporary Architecture - Tension Structures*, Building Centre, London 1989.
- 1990 *The Engineers' contribution to Contemporary Architecture - The Interaction of Structure and Services*, The Building Centre Trust, London 1990.
- 1992 *The Engineers' contribution to Contemporary Architecture - The Art of the Structural Engineer*, The Building Centre Trust, London 1992.

Smaller contributions to books

- 1997 Entries on William Fairbairn (p.181); Anthony Hunt (pp. 228-229); L'invention (pp. 236-238); Matériaux intelligents (pp. 288-289); Mining & Metallurgy Building, Birmingham University (pp. 303-304); Schlumberger Cambridge Research (pp. 438-439); Bâtiment de l'arsenal de Sheerness (pp. 455-456), in A. Picon, *L'art de l'ingénieur - constructeur, entrepreneur, inventeur*, Éditions du Centre Pompidou, Paris 1997.
- 2002 Entries on Christopher Wren (pp. 799-802) and Robert Hooke (pp. 334-337), in A.W. Skempton et al. (eds.), *Biographical Dictionary of Civil Engineers Vol.1. 1500-1830*, Institution of Civil Engineers / Thomas Telford, London 2002.
- 2003 Entries on George Stephenson and The History of Engineering, in D. Loades (ed.), *Readers' Guide to British History*, Routledge, New York 2003.

Bill Addis - List of publications on history and philosophy of engineering

- 2004 Entries on Concrete Shells, Fire Engineering, and Experimental Stress Analysis, in C. Hempstead, W. Worthington (eds.), *Encyclopaedia of Twentieth Century Technology*, Routledge, New York 2004.

Refereed periodicals and conference papers

- 1982 *Some Problems of looking at the History of Structures in terms of "Theory" and "Practice", and a Proposed Solution*, in International Association for Bridge and Structural Engineering - Colloquium on History of Structures, Cambridge 1982, pp. 61-66.
- 1983 *A New Approach to the History of Structural Engineering*, "History of Technology", Vol.8, 1983, pp. 1-13.
- 1988 *Models in Engineering Science and Engineering Design*, in International Association for Bridge and Structural Engineering - Challenges to Structural Engineering, Helsinki 1988, pp. 769-774.
- The Teaching of Building Design by Simulation*, in A. Melezinek (Hrsg.), *Technik lehren: Technik lernen; Referate des 17. internationale Symposiums "Ingenieur-pädagogik '88*, Leuchtturm Verlag, Basel 1988, pp. 250-255.
- The Use of Computer Simulation in Structural Design Education*, in International Association for Bridge and Structural Engineering - Challenges to Structural Engineering, Helsinki, 1988, pp. 225-230.
- 1989 *Building Performance in the Construction Management Curriculum*, in *Implementation of the Performance Concept in Building in Education and Training*, Conseil International du Batiment Lisbon 1989, pp. 109-117.
- The Evolution of Structural Engineering Design Procedures - A History for that Skill called Design*, "Transactions of the Newcomen Society", 61, 1989-90, pp. 51-64.
- 1991 *Engineering Design Procedures as a Form of Knowledge*, in *New Perspectives on the Dissemination and Synthesis of Engineering Knowledge*, European Society for Engineering Education (SEFI), Marseille 1991, pp. 335-344.
- The Experience of Industrial Secondment by University Staff*, in *New Perspectives on the Dissemination and Synthesis of Engineering Knowledge*, European Society for Engineering Education (SEFI), Marseille 1991, pp. 199-204.
- 1992 *An Academic Approach to Understanding the Nature of Design*, in *Education for Structural Engineering*, Innovative Engineering Press, Sheffield 1992, pp. 289-295.
- Engineering History and the Formation of Design Engineers*, "International Journal of Engineering Education", Vol.8, No.6, 1992, pp. 408-412.
- Structural Engineering History and the Education of Structural Engineers*, in *Education for Structural Engineering*, Innovative Engineering Press, Sheffield 1992, pp. 21-28.
- The Design procedure as a means of Storing Engineering Knowledge*, "European Journal of Engineering Education", Vol.17, No.4, 1992, pp. 387-395.
- The Myth of Technology Transfer*, in *3rd World Conference on Engineering Education (SEFI), Industrial Links, Computers and Design*, Vol. 3, Computational Mechanics Publications, Southampton, 1992, pp. 391-396.
- The Rôle of the Study of History in the Formation of Engineers*, in *3rd World Conference on Engineering Education (SEFI), International, Quality and Environmental Issues*, Vol. 1, Computational Mechanics Publications, Southampton, 1992, pp. 463-468.
- 1993 *Making Engineering Sense of Vitruvius*, in *Technology Change*, Oxford University (conference proceedings) (1993)
- 1994 *Design Revolutions in the History of Tension Structures*, "Structural Engineering Review", Vol.6, No.1, 1994, pp. 1-10.
- Developing structural designers: a new graduate course at UCL* (with J.R.Eyre, P. Morreau, J. Croll) "The Structural Engineer", Vol.72, No.14, 19 July, 1994, pp. 232-234.
- 1996 *Architectural Education - meeting the challenge* (with H. Haenlein), "International Journal of Architectural Management, Practice and Research" no.12, 1996, pp. 15-22.
- Free will and determinism in the conception of structures*, Proceedings of International Symposium on Conceptual Design of Structures, University of Stuttgart International Association of Shell and Spatial Structures, Stuttgart, 1996. pp. 29-36.
- On becoming and being an engineer*, International Association for Bridge and Structural Engineering – Colloquium, Cambridge, Institution of Structural Engineers, London 1996.
- Structural Criticism and the Aesthetics of Structures*, Congress Report, 15th Congress of International Association for Bridge and Structural Engineering, Copenhagen (1996). pp. 121-126.
- 1997 *Free will and determinism in the conception of structures*, "Journal of the International Association for Shell and Spatial

Bill Addis - List of publications on history and philosophy of engineering

- Structures”, Vol.38 No.2 (1997), pp. 83-89.
- On being an Engineer*, “Patterns”, No.12 July 1997, pp. 4-40.
- 1998 *The international Competitiveness of Consulting Engineers: the Role to be played by Technical Marketing* (with M. Al-Ghamdi), First International Construction Marketing Conference: Opportunities and Strategies in a Global Marketplace, University of Leeds, 1998, pp. 29-39.
- The Role of Technical Marketing in effective implementation of Total Quality Management by Consulting Engineering Firms* (with M. Al-Ghamdi), Fourteenth Annual ARCOM Conference, University of Reading, 1998, pp. 615-623.
- The RSA Student Engineering Design Awards*, in *Engineering Design Education '98 - Design at the Interface*, Proceedings of the 20th SEED Annual Design Conference, Imperial College, London, 1998, pp.119-122.
- Using individual projects to develop in young engineers an understanding of the skills of other disciplines*, in *Engineering Design Education '98 - Design at the Interface*; Proceedings of the 20th SEED Annual Design Conference, Imperial College, London, 1998, pp. 40-46.
- Using the history of engineering design*, in *Engineering Design Education '98 - Design at the Interface*; Proceedings of the 20th SEED Annual Design Conference, Imperial College, London (1998), pp. 97-100.
- 1999 *Design decisions and engineering rationale*, in M. Voyatzaki (ed.), *Architecture and engineering: the teaching of architecture for multi-disciplinary practice*, Proceedings of Conference of European Association for Architectural Education, University of Plymouth, 1999, pp.481-82.
- The history of using glass in buildings and some thoughts about the future*, in *Glass in Buildings*, University of Bath, Centre for Window and Cladding Technology, 1999, pp. 15-22.
- The myth of the architect-engineer: a late 20th-century, British who-dunnit.*, in Voyatzaki, M. (Ed.) *Architecture and engineering: the teaching of architecture for multi-disciplinary practice*, Proceedings of Conference of European Association for Architectural Education. University of Plymouth, 1999, pp. 87-93.
- 2000 *Aesthetics is not just about appearances*, in Congress Report, 16th Congress of International Association for Bridge and Structural Engineering, Luzern, 2000. Summary only pp.24-25 (Full paper published on accompanying CD.)
- 2002 *Developing a better understanding of the engineers' creative role in design*, “Journal of Spatial Structures”, vol.17, No.2-3, 2002, pp. 129-133.
- Technological innovation and progress in building engineering and architecture*, in H. Louw (ed.), *The Place of Technology in Architectural History*, Society of Architectural Historians of Great Britain. 2002, pp. 47-52.
- 2003 *Inventing a history for structural engineering design*, in S. Huerta (ed.), *Proceedings of the First International Congress on Construction History*, Instituto Juan de Herrera, Madrid 2003, pp.113-122.
- The nature of progress in construction engineering history*, in S. Huerta (ed.), *Proceedings of the First International Congress on Construction History*, Instituto Juan de Herrera, Madrid 2003, pp.123-129.
- 2004 *A history of using models to inform the design and construction of structures*, in *Shell and Spatial Structures: from Models to Realization - Symposium of the International Association for Spatial Structures*, Montpellier, France, 2004. Published on CD only.
- 2006 *The Crystal Palace and its place in Structural History*, “Journal of Spatial Structures”, vol.21, No.1, 2006, pp. 3-19.
- The use of Scientific Calculations in Design procedures for heating, Ventilation, Day lighting and Acoustics from the eighteenth century to the mid-nineteenth century*, Second International Congress on Construction History, Cambridge, England 2006, pp. 127-151.

Other media

Exhibitions (curator/director)

L'art de l'ingénieur - constructeur, entrepreneur, inventeur: contribution to conception and curation of exhibition at the Centre Pompidou, Paris. 25th June - 29th September 1997.

On Being an Engineer: an exhibition of the life and work of Sir Edmund Happold, 1930-96. (first shown April 1996; since then shown in various venues)

The Engineers' Contribution to Contemporary Architecture, The Building Centre, London. Exhibition 1 - *Tension Structures*, December 1989 - January 1990; Exhibition 2 - *The Interaction of Structure and Services*, February - March 1991; Exhibition 3 - *The Art of the Structural Engineer*, January - February 1992.

Bill Addis - List of publications on history and philosophy of engineering

The Art of the Structural Engineer, Birmingham Exhibition Centre Interbuild 1993.

The Art of the Structural Engineer (new version), RIBA, London, September 1994.

Audio tapes

Mills and warehouses in nineteenth-century England, 30-minute Audio-cassette for Open University Course AT308 (1999)

Steel and concrete frame buildings in twentieth-century England, 30-minute Audio-cassette for Open University Course AT308 (1999)

Educational Slide Packages (author/compiler)

The Engineers' Contribution to Contemporary Architecture - The Interaction of Structure and Services, CERCI, London, June 1993.

The Engineers' Contribution to Contemporary Architecture - The Art of the Structural Engineer, CERCI, London, June 1993.