References

Alexander, C 1964. Notes on the synthesis of form. Cambridge, MA: Harvard University Press. Benaïssa, A and F Pousin 1999. Figuration et négociation dans le projet urbain. Les cahiers de la recherche architecturale et urbaine, no. 2–3, 119–134.

Bugaisen, N 2000. Conventions and personal preferences in graphic architectural representation: Historical evolution and transitions in the modern era. Masters thesis, Technion.

Eisenman, P 1986. Houses of cards. Oxford: Oxford University Press.

Evans, R 1995. The projective cast. Cambridge, MA: MIT Press.

Fish, J (this volume). Cognitive catalysis: Sketches for a time-lagged brain. In Design representation, edited by G Goldschmidt and WL Porter.

Fish, J and S Scrivener 1990. Amplifying the mind's eye: Sketching and visual cognition. Leonardo 23:117–126.

Goldschmidt, G 1991. The dialectics of sketching. Creativity Research Journal, 4(2):123-143.

—— 2002. Read-Write acts of drawing. In TRACEY, website dedicated to contemporary drawing issues; issue on Syntax of Mark and Gesture. http://www.lboro.ac.uk/departments/ac/tracey/somag/gabi.html Loughborough University, UK.

Goldschmidt, G and E Klevitsky (this volume). Stirling's museum projects in Germany: Graphic representation as reconstructive memory. In Design representation, edited by G Goldschmidt and WL Porter.

Grignon, M 2000. Deux brouillons: Le croquis et la maquette. In Genesis No. 14: Architecture, edited by P-M de Biasi and R Legault. Montreal: Centre Canadien d'Architecture/Jean-Michel Place, pp 153–162.

Grumbach, A 1979. Personal communication. (Antoine Grumbach is a French architect.)

Heath, T 1991. What, if anything, is an architect? Melbourne: Architecture Media Australia.

Herbert, DM 1988. Study drawings in architectural design: Their properties as a graphic medium. Journal of Architectural Education 41(2):26–38.

Klevitsky, E 1997. Three dimensional composition in architectural education in the 20's: The Bauhaus and Vkhutemas Schools. Masters thesis, Technion.

Klotz, H 1988. The history of postmodern architecture. Cambridge, MA: MIT Press.

Paradiso, A, E Baxter, and M Baumberger, eds. 2002. Retrospecta 01–02. New Haven: Yale School of Architecture.

Quantrill, M 1983. Alvar Aalto: A critical study. London: Secker & Warburg.

Quarante, D 1994. Eléments de design industriel. Paris: Polytechnica.

Schank-Smith, K 2000. L'esquisse et l'intervalle de la création. In Genesis no. 14: Architecture, edited by P-M de Biasi and R Legault. Montreal: Centre Canadien d'Architecture/Jean-Michel Place, pp 165-176.

Schön, DA 1983. The reflective practitioner. New York: Basic Books.

Schön, DA and G Wiggins 1992. Kinds of seeing and their function in designing. Design Studies 13(2):135–156.

Suwa, M, JS Gero, and T Purcell 1999. Unexpected discoveries and S-inventions of design requirements: A key to creative designs. In Computational models of creative design IV, edited by JS Gero and M-L Maher. Sydney: Key Centre of Design Computing and Cognition, University of Sidney.

Tapert, A 1990. SwidPowell: Objects by architects. New York: Rizzoli.

Trevisiol, R 1982. The round house. In La Casa Rotonda, edited by M. Botta, 81–83. Milano: L'erba Voglio.

Verstijnen, IM, JM Hennessey, C van Leeuwen, R Hamelm, and G Goldschmidt. 1998. Sketching and creative discovery. Design Studies 19(4):519–546.

Woolley, M (this volume). The thoughtful mark maker – representational design skills in the post information age. In Design representation, edited by G Goldschmidt and WL Porter.

Wrede, S 1986. Mario Botta. New York: Museum of Modern Art.

Yates, P (this volume). Distance and depth. In Design representation, edited by G Goldschmidt and WL Porter.

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