Plastic Visions in Art and Science

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Techniques of instrumental seeing, such as sonar, electron microscopy and X-ray diffraction, pose particular problems in spatial visualisation and representation. However, the basic skills of mental modelling and graphic representation have existed in various guises in art, architecture, technology and science since the Renaissance (at least). The kinds of skills demanded in crystallography will be set in a broader context of visualization through the selective examination of key episodes from the era of Leonardo to the present day. Some of the examples will be drawn from my regular column in *Nature*, which has in part appeared in book form [1].



Buckminster Fuller, Dome for Expo '67, Monteal

[1] Kemp M.K., Visualisations. The Nature Book of Art and Sceince, 2000. Keywords: x-ray diffraction techniques, molecular modelling, computer modelling solids