

see Alphonse Legros's interpretation (no.82; c.1885–90; Scottish National Gallery, Edinburgh) of Raphael's *Heads of the Virgin and Child* (no.55; British Museum). Even today past models continue to inspire artists, as in the case of Carol Prusa, who took up metalpoint after studying Leonardo's *Study for the setting of the 'Adoration of the Magi'* in the Uffizi and which led to her make *Limina* of 2011 (p.235, fig.7).

Hugo Chapman writes that 'Metalpoint, more than any other graphic technique, honed the mental and practical skills required in *disegno* as it demanded careful calculation how to realize an artistic conception within its structures' (p.105). It is interesting to ask why this, the most linear of techniques, did not have a revival in Florence in the 1560s, when the theory of *disegno* as *lineamentum* was developed, above all in Alessandro Allori's *Il primo libro de' ragionamenti delle regole del disegno*, as well as in Vasari (book I, chapter 15 of the Giuntina edition of the *Lives*). When discussing drawing techniques in the following chapter, Vasari does not mention metalpoint. By this date, both in Florence and elsewhere in Italy, the technique had been virtually abandoned (after 1515 even Raphael seems to have stopped using it), and Chapman suggests that Michelangelo's use of black and red chalk and pen led to their widespread use by Florentine artists (p.114). It is true that it was easier to

express the dynamism of creative thought by means of more rapid and flexible techniques (it is enough to think of Leonardo's use of pen and ink) in a new vision of the artist's work that combined the intellect, the idea, the hand and experience, all under the aegis of *disegno*, defined by Vasari as the father of the three arts (painting, sculpture and architecture). The fact that silverpoint appears on two rare pages of Vasari's *Libro de' Disegni* (nos.43–44; Fig.65) which also includes lead point, shows that as a collector he still appreciated techniques that were virtually obsolete.

In discussing the Master of the Housebook (fl. c.1470–1500), Giulia Bartrum writes: 'It seems very probable that the artist developed his lightly scratched drypoint technique as a means of replicating images of the type portrayed in his silverpoint drawings' (p.69). The relationship of metalpoint with engraving would seem to have been close for other artists too.

Mantegna did not use silverpoint, as Chapman remarks (p.106). Instead, working in pen, the artist achieved an amazing refinement in indicating light and shade by using parallel lines characteristic of late-quattrocento Florentine prints in the so-called *Maniera Fine* and *Maniera Larga*, also found in certain German engravings. In his drawing technique, Parmigianino was Mantegna's true heir, also capable of creating subtle

luministic effects. Both demonstrated the profound interrelationship between technical experimentation in the fields of drawing and printmaking. It is worth adding that in telling the history of metalpoint one cannot leave out the parallel technical innovations in printmaking.

One of the many merits of this exhibition was the opportunity it provided to study the development of a drawing medium and the various challenges it set the artists to overcome its limitations, ranging, as it did, over a wide cultural and geographic area and different epochs. One can but hope that such an exhibition will encourage a revival of metalpoint, producing genuinely original art quite independent of the medium's traditional use.

¹ Catalogue: *Drawing in Silver and Gold. Leonardo to Jasper Johns*. Edited by Stacey Sell and Hugo Chapman, with contributions by Kimberly Schenck, John Oliver Hand, Giulia Bartrum, An van Camp, Bruce Weber, Joanna Russell, Judith Rayner and Jenny Bescoby. 313 pp. incl. 181 col. ills. (National Gallery of Art, Washington; British Museum, London; Princeton University Press, Princeton and Oxford, 2015), £34.95. ISBN 978-0-691-16612-4.

² Interest in metalpoint was stimulated in the United States by B. Weber, ed.: exh. cat. *The Fine Line: Drawing with Silver in America*, Florida (Norton Gallery and School of Art) 1985, and more recently in England by the publication of T. Burns: *The Luminous Trace: Drawing and Writing in Metalpoint*, London 2012.

³ H. Chapman and M. Faietti, eds.: exh. cat. *Fra Angelico to Leonardo. Italian Renaissance Drawings*, London (British Museum) 2010; reviewed by Carmen Bambach in this Magazine, 153 (2011), pp.417–19.

65. *Risen Christ and studies of hands*, by Raffaellino del Garbo, c.1495–97, album sheet by Giorgio Vasari, from his *Libro di Disegni*. Silverpoint heightened with white over blind stylus on paper, 37.8 by 25.5 cm. (British Museum, London).



Charles and Ray Eames

London

by TANYA HARROD

THE LAST MAJOR show devoted to the design work of Charles and Ray Eames was jointly hosted by the Library of Congress, Washington, and the Vitra Design Museum, Weil am Rhein, some seventeen years ago, in 1997–98. This was an exciting time for Eames studies. Pat Kirkham's double biography *Charles and Ray Eames: Designers of the Twentieth Century* (1995) had appeared two years previously, offering a brilliant analysis of the creative dynamics of the husband-and-wife team and a substantial re-evaluation of the role of Ray Eames, whose career, until then, had largely been subsumed under her husband's name and that of the Eames Office. The catalogue of the 1997–98 exhibition, *The Work of Charles and Ray Eames: A Legacy of Invention*, edited by Donald Albrecht, contained a provocative essay by Joseph Giovannini which went further than Pat Kirkham in adjusting Charles Eames's achievements, not only in favour of contributions made by his wife, but also those of Eero Saarinen (in the context of the first furniture designs) and such figures as Harry Bertioia, who worked in the



66. Installation view of *The World of Charles and Ray Eames* at the Barbican Art Gallery, London, 2015, showing the recreation of the Eames Office room display for the exhibition *Modern Living* at the Detroit Institute of Arts, 1949.

Eames Office in the crucial early days. Other essays included Beatriz Colomina's penetrating study of the Eames House and Helène Lipstadt's analysis of the Eames Office's interaction with government agencies and corporate America against the backdrop of the Cold War. Both the show and the catalogue were widely acclaimed.¹

So what can *The World of Charles and Ray Eames*, on view at the **Barbican Art Gallery, London** (to 14th February), and curated by Catharine Ince, add to its distinguished predecessor? The answer must be: a great deal. There is, of course, the sheer visual pleasure of engaging with such a varied design practice, encompassing furniture, toys, a pair of remarkable houses and exhibition-making (Fig.66), as well as a substantial body of film and multimedia work that forms an especially important part of this show. *The World of Charles and Ray Eames* is accompanied by a magnificent book (although not, sadly, a catalogue), which has been designed by the John Morgan Studio.² *An Eames Anthology*, edited by Daniel Ostroff,³ is a useful companion publication in which the Eameses emerge as persuasive writers on public issues. By contrast, their more personal communications, some of which are on display at the Barbican, appear artless in the extreme.

The Barbican exhibition opens with Charles's wartime experiments with moulded plywood and Ray's employment of them to make curvilinear organic sculptural forms. These playful moves between function and art are further explored in a wall of moulded leg splints, successfully used by the military, and a ply stretcher. Further examples of Ray's sculpture are accompanied by a generous selection of her 1942–47 cover designs for the West Coast magazine *Art & Architecture* and a set of jewel-like ink, collaged and painted abstract works, which make clear Ray's painterly and sculptural sophistication and her vital contribution to the partnership. A

display of photographs of Ray and Charles surrounded by members of their studio makes another point (Fig.67). Charles may have been a latecomer to Modernism and less sensitive than Ray to organic and curvilinear design, but he had sufficient confidence and charisma to create and project an extraordinarily versatile and professional design office.

Part of this projection centred on Charles and Ray's carefully calibrated dress and demeanour.⁴ An amusing contrast can be drawn with other twentieth-century images of architects and designers: Mies van de Rohe pictured gazing grumpily at his Farnsworth House in 1951, and Peter and Alison Smithson (great fans of the Eameses), Nigel Henderson and Eduardo Paolozzi posing grimly with a pair of Eames chairs in a foggy Chelsea street

in 1956.⁵ Although Charles in particular wrote consistently about the horrors of unrestrained and unplanned development in Los Angeles,⁶ the proximity of the film industry shaped them both. All available images of the pair picture them joyfully inhabiting a world of their own design.

While nothing can detract from the elegance (and initial affordability) of the chairs and case furniture designed by Charles and Ray Eames – with important, often unacknowledged, input from others – this exhibition highlights the central role of communication design in their practice. As well as products, the Eames Office offered their clients filmic presentations characterised by sensory overload, moving and still images, insistent musical scores, hypnotic voice-overs and, in the case of their early multimedia lecture *A rough sketch for a sample lesson for a hypothetical course* (1952), olfactory sensations. The clunky but poetic billing of *A rough sketch*, as with the short film *Banana leaf: something about transformations and discovery* (1972), was typical. As Catherine Ince points out in the accompanying book, the Eameses liked the 'working titles' used in the film industry.

A rough sketch also brings out a darker side to their all-embracing practice. Made for the Department of Fine Arts at the University of Georgia, it eerily anticipates the current and controversial Massive Open Online Courses, known as MOOCs. *A rough sketch* was an early attempt to 'retool' the one-to-one student-teacher relationship that is still central to an art school education. And the Eameses' vision of 'the best of the most for the least' was, as Sam Jacobs points out in his contribution to the book, translated into service for what Eisenhower, in his famously melancholy 1961 retirement speech, saw as America's 'military-industrial complex'.⁷ The Eameses saw working for bodies like the United States Information Agency (USIA) to be a public



67. Eames Office staff posing in a model for *Glimpses of the U.S.A.* for the American National Exhibition, Moscow, 1959. (Eames Office LLC; exh. Barbican Art Gallery, London).



68. Installation view of *Glimpses of the U.S.A.*, American National Exhibition, Moscow, 1959. (Eames Office LLC).

duty, while some of their finest works, *Powers of ten* and *Think*, were made to hone the public image of corporations like IBM.

Yet when Eisenhower spoke in his speech of the demise of 'the solitary inventor, tinkering in his shop', now 'overshadowed by task forces of scientists in laboratories and testing fields', he was overlooking the unusual contribution of the Eameses. They *were* tinkerers, completely hands-on designer-makers who brought humanity to Cold War propaganda – perhaps most brilliantly in the seven-screen presentation *Glimpses of America* made for the USIA to show at the America National Exhibition

held in Moscow in 1959 (Fig.68). Soviet Russians saw 2,200 images in twelve minutes, from cornfields to steel mills, from Marilyn Monroe to baseball games, from lawn-mowing to children's bedtimes. With an urgent, jazzy score by Elmer Bernstein, America was presented as productive and inclusive, rich in consumer goods and in intellectual, pastoral and sporting pleasures.

Coercion is not an aspect of the Eameses' work that immediately comes across in this exhibition. The ambivalence of the Eames Office's role was inevitably more powerfully conveyed in the Victoria & Albert Museum's

2008 exhibition *Cold War Modern: Design 1945–1970*.⁸ At the Barbican we are mostly prompted to admire their particular brand of Modernism, which offered the public so much, and so generously. For instance, the Eameses' appreciation of objects from around the world was transmitted to all of us through delightful films like *Toccata for toy trains* (1957) and *Tops* (1969). The interior of their house at Pacific Palisades (Fig.69) showed how the humblest things can interact and produce beauty. 'Less is more' was not an option.

The Eameses combined Modernism with a positively Victorian love of taxonomies. Their libraries of images and objects recalled John Ruskin's educational collections and Johann Heinrich Pestalozzi's even earlier 'Object Lessons'. Charles aligned himself with W.R. Lethaby and Eric Gill in his fondness for darned socks and belief that effective design meant that 'Beauty will look after itself'. In addition, the ways in which both Eameses worked to provide a blueprint for design education in post-independence India is retrospectively moving and poignant, a demonstration of neo-colonialism at its least offensive. Sometimes, however, the soft power exerted through the Eames Office appears disturbing. For example, *Think* was a multi-screen presentation made for the IBM pavilion at the 1964–65 New York World's Fair. It is shown in slightly abbreviated form at the Barbican. Its purpose was to naturalise computing by demonstrating the similarities between the electronic brain and our own. Not even Charles's soothing voice-over and Elmer Bernstein's crackerjack soundtrack can disguise the fact that this particular 'blast on the senses'⁹ was, quite simply, beguiling brainwashing, the simplifications of which were intended to subtly mislead its audience. But allowing us both to admire and to question Charles and Ray Eames's rich and complex practice is one of the strengths of this fine exhibition.

69. Eames House living room, Pacific Palisades, 1958. (Eames Office LLC; exh. Barbican Art Gallery, London).



¹ See the review by Charlotte Skene-Catling in this Magazine, 140 (1998), pp.841–42.

² *The World of Charles and Ray Eames*. Edited by Catherine Ince and Lotte Johnson. 320 pp. incl. numerous col. + b. & w. ills. (Thames & Hudson, London, 2015), £45. ISBN 978-0-500-51830-4.

³ *An Eames Anthology: Articles, Film Scripts, Interviews, Letters, Notes, and Speeches*. Edited by Daniel Ostroff. 420 pp. incl. 94 col. + 129 b. & w. ills. (Yale University Press, New Haven and London, 2015), \$50. ISBN 978-0-300-20345-5.

⁴ A. Moloney: 'The Dress of Charles and Ray Eames', in Ince and Johnson, *op. cit.* (note 2), pp.148–51.

⁵ Steve Parnell's essay 'Charles and Ray Eames, the Proto-Brutalists', claiming the couple for Brutalism, is one of the less convincing essays in *ibid.*, pp.98–103.

⁶ See Ostroff, *op. cit.* (note 3), *passim* but particularly pp.226 and 244.

⁷ S. Jacob: 'Context as Destiny: The Eameses from California Dreams to the Californiafication of Everything', in Ince and Johnson, *op. cit.* (note 2), pp.164–67.

⁸ Reviewed by Henry Meyric-Hughes in this Magazine, 151 (2009), pp.113–14.

⁹ Charles Eames, quoted in D. Crowley and J. Pavitt eds.: exh. cat. *Cold War Modern: Design 1945–1970*, London (Victoria and Albert Museum) 2008, p.184.