

Steven F Joseph

Presenting pictures in the new Conservatoire National des Arts et Métiers: a commentary

‘You have here a clean temple, with neither images or fetishes; here everything carries the imprint of genius, a place where utility has reached its peak.’

August Strindberg

For those of us accustomed in recent years to the exhibition of vintage prints in wall-dominated presentations in an atmosphere of luxury, the Musée des Arts et Métiers will come as a breath of fresh air. Since the 1970s, the display of photographs in museums has been increasingly influenced by the practices of the gallery scene and dealers in contemporary art. At the basis of this development has been the rise in the value of early prints, which have moved from the realm of ‘photographica’ into the spotlight of high art. Sometimes, as with single-author exhibitions, such an approach is justified. But often, a well-mannered display can sacrifice context and explanation in favour of surface aesthetics and media-oriented impact.

To enter the exhibition halls of the Musée des Arts et Métiers, therefore, is to be greeted by a kinder, gentler museology. The CNAM’s approach to the photographic image is conditioned by the latter’s existence as an artefact of the technological process rather than a statement of artistic self-expression. Aesthetic considerations take a back seat, while the guiding principle of process/product inevitably recalls an era before the photographic print became an adjunct of the art market, and scholarly interest in the products of print-making was closely linked to the process of picture-taking. Furthermore this approach has its roots in the nineteenth-century heyday of the collection, and can even be traced as far back as the mentality informing the very establishment of the institution.¹

In the first half-century of photography, the CNAM demonstrated a precocious if sporadic interest in acquiring cameras and other material representing the major formats and processes used in the development of the medium. Collecting images tended to be a fortuitous by-product. This fact is central to current museum practice there, and may be considered as historically inevitable given the original mission of the Conservatoire, of which the Museum remained an integral part organisationally until the late twentieth century. Henri Grégoire, a

non-conformist priest at the French revolutionary Convention in 1794, proposed 'the creation of a Conservatoire for the arts and crafts, in which all newly invented or improved tools and machines will be gathered'. The higher aim was to 'enlighten ignorance' and thus 'improve national industry'. Thus, since its inception, the CNAM has had a dual purpose: conservation (including demonstration) and practical education as a means of knowledge dissemination and technology transfer. In Grégoire's colourful metaphor, 'The Conservatoire will be a reservoir whose canals will fertilise the whole of France.' The nationalist aim should not be underestimated, since it remained a major consideration of the French elite in the nineteenth century, fearful of British and German industrial expansion. And this consideration applied equally to photography, a new medium of which the French could rightly claim paternity.

The neat line of chronology is ever-present, as a stroll through the photographic holdings of the museum soon reveals. Photography falls within the domain of Communications, which makes up about 10 per cent of the total collections of the museum's seven domains, occupying the largest display area of 800 square metres. This particular domain is understood as all technical means of recording, transmitting and processing information, and covers the areas of printing and the graphic arts, telegraphy, telephony, sound recording, computing and telecommunications, as well as photography and its applications. Photography occupies the largest wall area within the spacious and airy Communications gallery (Colour plate 14), where all but the largest artefacts are exhibited in traditional glass-fronted display cabinets against the four walls. Down one side the area devoted to photography opens with antecedents of camera obscura, magic lantern and other viewing devices; on the facing wall, synchronous developments in printing and the graphic arts act as counterpoint, as the hegemony of the typographic word and flat-bed press was beginning to make way for newer techniques such as lithography. There is no polemic as to whether photography is a science or an art. Such considerations are irrelevant here, and not raised in the introductory wall labels: photography is simply a technology amongst others in the same broad domain. This approach works well within the self-imposed limits of the museum space, setting out by induction (rather than demonstrating overtly) how photography arose from the combination of two basic scientific principles using a process to create a product – the image of objects captured in the camera obscura made durable by the action of light on a sensitive surface.

The richness of artefacts presented for the earliest period enables the display to chart precisely the reception, growth and expansion of the new technology – in short its take-up or process of socialisation – subliminally within a context of parallel or global developments in the 'allied' technologies on the opposite side of the gallery. The first



Figure 1 Camera from Daguerre's studio and laboratory, dated 1835–39, donated by Messrs F Bapterosses and A Loreau of Briare (Loiret) in 1884 (Inv. 09553-7). (Musée des Arts et Métiers–CNAM)



Figure 2 Daguerreotype camera made by Alphonse Giroux, 1839, donated by Eugène Sevytz in 1889 (Inv. 11785-1). (Musée des Arts et Métiers–CNAM)

photographic artefact per se is a sliding-box camera (Figure 1) which belonged to Louis Jacques Mandé Daguerre, one of the co-inventors of photography, and was probably used by him in the late 1830s. It is one of the museum's 150 'flagship objects' accorded special attention, and is here presented alongside a touch-screen visual simulation of how the daguerreotype image was produced. With this artefact begins the first step in the socialisation of photography, its experimental or laboratory phase. This was the period in the late 1830s when the inventors or collaborators hoped to market the invention, without it fulfilling as yet the two necessary preconditions of viability (accuracy, reliability, security of use) and response to a more-or-less defined market need. Daguerre met great societal resistance when he tried to sell shares in the invention in 1838, perhaps reinforced by his own reluctance to reveal details of the process to prospective investors.

The second phase of socialisation occurs when financial incentives, the assistance of entrepreneurs willing to shoulder the risk of commercialisation, enable the invention to become truly viable. The next display case features a key artefact in the initial attempts to market photography in 1839, an example of the first camera to be commercially produced (Figure 2). Alphonse Giroux's camera, based closely on Daguerre's design, adds a lens fitted with a pivoted cover plate to act as a shutter. The side panel bears Giroux's seal and Daguerre's signature of authenticity. The display of these two very similar artefacts side by side, perhaps the only such juxtaposition in a public collection anywhere, demonstrates clearly that while 1839 was a milestone for the socialisation of photography, the year that this combination of process and product was unveiled to the world, the technology had not yet moved on significantly.

The two illustrations (Figures 1 and 2) do not do justice to the actual display, where the cameras are accompanied by the accessories necessary for processing and fixing the image, the use of which is demonstrated in the 'flagship' simulation. The Giroux camera and one of Daguerre's demonstration plates (Figure 3) were loaned in 2003 to the temporary exhibition 'Le daguerreotype français – un objet photographique' at the Musée d'Orsay. The contrast with display practice at the CNAM was quite striking. While the daguerreotype in the Orsay show was exhibited on the wall with its peers, the camera was set apart in a walk-around glass case, a mild exercise in decontextualisation, the artefact transformed into a quasi-fetish.

The year 1839 witnessed the simultaneous announcement of two significant and coexisting variants of photography – the unique direct positive on metal ('daguerreotype') and the paper negative ('photogenic drawing') invented by William Henry Fox Talbot, used as a matrix for printing as many positives as required. In the initial rivalry, Daguerre's process was generally held to be superior, on the grounds that it produced sharper images. But the negative-positive



process won out by virtue of its versatility. This development, in the first half of the 1850s, heralded the third phase of the medium's socialisation, when invention became innovation and the technology was being exploited, in satisfactory conditions, with a concomitant growth in demand. The first mass-produced photographic prints, in stereoscopic format, were produced. Their popularity, especially in continental Europe, could owe its origins to the cameras manufactured by Louis Jules Duboscq (Inv. 5393 and 5408), which were the first artefacts in the domain to be donated to the CNAM by the manufacturer himself, as working models. This practice of donation, contemporaneous with patent application or marketing, would become a popular source for acquiring photographic equipment in the final quarter of the nineteenth century, its rise plotted in the first, chronologically ordered, catalogue of the CNAM's holdings in the domain, published in 1907.

At this point it may be judicious to interrupt our stroll through the Communications gallery and address the topic in the title. To take the museum on its own terms is to be confronted with the non-presentation of pictures. In fact the exhibition space corresponds

Figure 3 Still life of fossils and shells, daguerreotype by Louis Jacques Mandé Daguerre, 16.3 × 21.2 cm, taken in 1839, donated by the Société libre des Beaux-Arts in 1875 (Inv. 8745-2). (Musée des Arts et Métiers-CNAM)

exactly to Strindberg's 'clean temple, with neither images or fetishes'. With one important class exception, to which I will return, there are no original prints to be seen. The only images are virtual, on a couple of touch-screen interactive work stations placed before some comfortable sofas in the middle of the gallery, showing combinations of processes and applications in a chronological structure (1839–50, 1850–80 and 1880–1914). This radical choice, the representation rather than presentation of photographic prints, arises from the purest logic, according to Dr Marie-Sophie Corcy, the curator of the Communications domain. During the 1990s, after a period of decline, a programme of major works was decided upon, and a team of historians and engineers specified the path that the renovated museum should follow in order to open up the institution to a broader public. Dr Corcy, a young researcher in the history of technology, was appointed curator, and proceeded with an in-depth remoulding of the permanent exhibition. Her specialisation in early photography, including a doctoral thesis presented at the Sorbonne in 1997, proved a great advantage.²

Dr Corcy had at her disposal a body of about 1000 three-dimensional artefacts, and an estimated 15,000 images, only a third of which had been included in the 1907 catalogue. But she had no effective item-level inventory to call upon. It would be a challenge to offer a stronger narrative/chronological history of the medium, highlighting the technological advances embodied in each class of selected works. All artefacts would be housed in the traditional wooden and glass cabinets, in a gallery lit by natural light. This rehang determined the fate of the images, the vast majority being silver-based, and therefore light-sensitive and unsuitable for long-term display in broad daylight. However, in time for the museum's reopening in 2000, Dr Corcy was able to exploit new museological techniques: touch-screen presentation of the images is meant to offer a fresh and accessible approach to the medium, while protecting the originals in archival conditions. The originals are housed in a custom-designed repository, built in the inner suburb of Plaine Saint-Denis, open to researchers by appointment, and including restoration workshops among its facilities. Dr Corcy sees this solution as the best trade-off between the constantly conflicting requirements of preservation and access. Individual prints are loaned for exhibitions outside the institution, such as the Orsay show, while the on-site print room is a venue for temporary exhibitions drawn from the museum's holdings.

When deciding on the rehang she wished to undertake, Dr Corcy was particularly conscious of the need to show typical as well as visionary artefacts within the same cabinet, not wishing to give undue prominence to the atypical or eye-catching camera and thus risk distorting the medium's narrative thrust. This is particularly the case during the fourth phase in the socialisation process, which

Dr Corcy terms 'the collodium age'. Over a 20-year period of rapid expansion from the early 1860s on, socialisation gathered pace and was consolidated. Society accustomed itself to the new technology, consisting of a system in equilibrium (the process of wet collodium on glass negatives) and a universally acceptable product (albumen prints on standard-format card mounts), the main commercial outlet for which was portrait photography. Mainstream studio apparatus is shown alongside the Dubroni (Inv. 16880-1). This marvel of compactness was the first successful camera with in-built sensitising and processing capability, designed in 1864 by G J Bourdin and marketed under an anagram of its maker's name.

The curator's choice for a second 'flagship' artefact among the many exhibits is equally revealing of her conviction that the narrative of the medium cannot rely exclusively on the technology, but should be anchored within the broader social picture. In the final two decades of the nineteenth century, photography experienced a quantitative leap. In the wake of the introduction of the gelatine dry-plate process, which liberated the photographer from the dark room, smaller, portable cameras were marketed. To embody this fifth phase of socialisation, when photography moved out of the studio and enjoyed wide social diffusion, Dr Corcy selected Enjalbert's *Le Touriste* (Inv. 17223). As its name suggests, its maker targeted the growing body of amateur excursionists, and his camera was fitted with a plate-changing back containing several frames, which simplified picture-taking in the field.

Another characteristic of the fifth stage in the socialisation process is the broadening of applications. Photography began to be applied to areas of human endeavour other than that for which it had been conceived. Such applications could be of strategic or military import, such as aeronautical survey (Figure 4), or practised within traditional scientific disciplines like microscopy and astronomy (Figure 5). In the mid-1890s the two major inventions to incorporate photographic technology were Roentgen's X-rays and cinematography. A major part of the Communications gallery presents the beginnings and expansion of cinematography, displaying one of three prototypes of the Lumière brothers' *Cinématographe* (Inv. 16966). The exhibition traces the extent to which the take-up of the moving image was much more rapid than that of photography itself, due in part to the transport and economic infrastructures which had transformed Europe in the previous 50 years.

The late nineteenth century also saw the high-water mark of the CNAM's active engagement with the industrialists and scientists who were moving photography forward. Under the impetus of Aimé Laussedat, director of the institution, a cycle of conferences was initiated in 1891/92, surveying the current state of the technology and its diverse applications. The speakers, specialists in their chosen field, were mostly Laussedat's fellow members of the leading learned body,



Figure 4 'Vue des environs de Bâle à 1260 m. d'altitude' ('View of the region of Basel at an altitude of 1260 m') by E Suter, process unknown, 12.0 x 16.0 cm, donated by Mme Laussedat in 1919 (Inv. 17695-6). (Musée des Arts et Métiers–CNAM)

the Société française de Photographie (SFP). The conferences were not of a practical nature, but rather aimed to diffuse knowledge of the current state of the art and even suggest potential avenues for further research. The cycle would never be repeated, so Laussedat's aim of organising higher education in the area of photography in France went unrealised. However, there would be lasting benefits for the holdings of the museum. In the first instance, many of the speakers enriched the CNAM's holdings by donating equipment and images used during their presentations. In the longer term, the cycle helped to consolidate the relations between the SFP and the CNAM, making the latter institution the depository of choice for obsolete or 'historic' equipment in the first half of the twentieth century.

In the 1920s, by which time photography had achieved its sixth phase of socialisation – pervasiveness or universality – an embryonic awareness of the history of the medium was forming. A first generation of French proto-photographic collectors and historians was piecing together the medium's past, and an attempt was made to place the CNAM's role as a photography museum on a more official footing. The initiator was the photographer Gabriel Cromer, a dynamic collector of photographic artefacts (his personal collection of prints would be acquired in 1939 by the International Museum of Photography at George Eastman House, Rochester, New York) and member of the SFP since 1912. Cromer set an example by donating

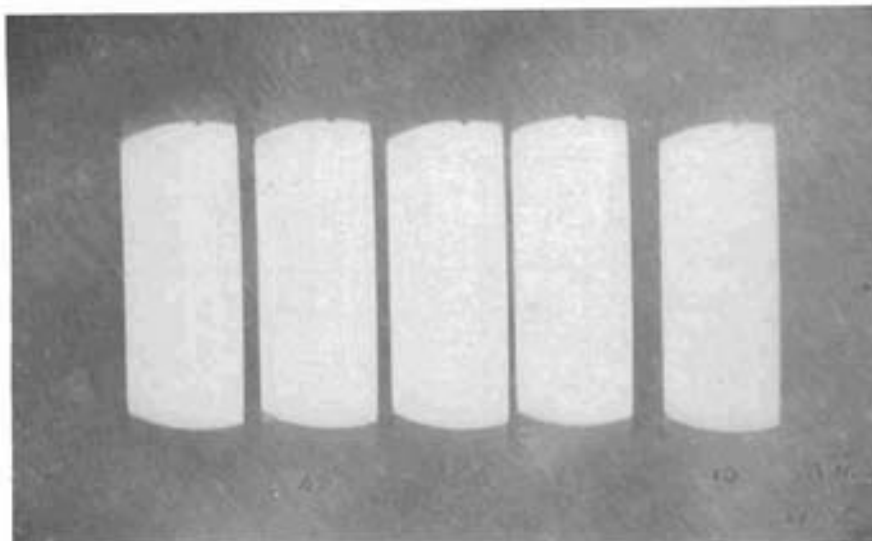


Figure 5 'Transit of Venus', daguerreotype by L. Picard, 8.0 x 12.0 cm, taken in 1874 during the scientific expedition sent to Nagasaki, Japan, accessioned in 1926 (Inv. 16517-2). (Musée des Arts et Métiers-CNAM)

over 90 items from his own collection to the CNAM and encouraged other individuals and institutions to do the same. A ministerial decision led to the inauguration of the CNAM's permanent photography exhibition in March 1927. The SFP's holdings of historic apparatus were merged with those of the CNAM to form a so-called Musée de la Photographie. It would not have been possible to achieve the current gallery's richness of presentation without these donations. The CNAM's focus as a national repository helped, for example, to consolidate its extensive collections of chrono-photographic material from Etienne-Jules Marey's laboratory (Inv. 16955). A basis had been laid several decades previously with his chrono-photographic camera that included a revolving disk mechanism (Inv. 11109), constructed by Bréguet in 1888 and accessioned the same year. Further sets of images were acquired later from Marey's family (Inv. 09820), but the disassociation in presentation of apparatus and prints within the current gallery layout means that process and product can only be appreciated as a creative ensemble in the context of temporary exhibitions.

During the 60 years up to 1900, conventional photography evolved to transform the practice and craft of book illustration through the application of photomechanical processes: photographic imagery in printers' ink. The sequence on the development of printing processes on the opposite side of the Communications gallery culminates in a double cabinet displaying photographs thus transformed into prints, the only class of pictorial imagery present as part of the permanent exhibition, since they are chemically stable under ambient lighting. The presentation covers the full panoply of processes exploited in France, ranging from Hippolyte Fizeau's pioneering attempts at using the daguerreotype as a printing plate (Inv. 16518-5) to the

perfection of the halftone screen for relief printing (Inv. 14503). Dr Corcy pursues an active acquisition policy in this area: her very first purchase on joining the curatorial staff was a photogravure print of Reims Cathedral by Emile Placet (Inv. 43070) for display alongside a copper gravure plate of the same image (Inv. 13007). The museum has also just agreed the purchase of artefacts from Alphonse Poitevin's workshop, which will complement its collection of proofs and trial prints (Inv. 09760) by this 'inventor of permanent photography'. Artefacts from the photomechanical printing collection were displayed in the museum in 2002 in its impressive temporary exhibition 'Les trois révolutions du livre'. Here they were able to occupy more space than would be feasible in the permanent display, and were accompanied by more comprehensive labels.

In the present day, a revolution is being wrought throughout the Communications sector via the use of photography and digital imaging. Dr Corcy sees the museum's role as twofold: firstly, by acquiring source material on this new phase in the development of imaging, she is bridging gaps in the narrative caused by the CNAM's previous era of benign neglect in the second half of the twentieth century. Secondly, the museum must continue to inventory, at item level, the many images in its custody bearing witness to the origins and development of the medium, eventually making them available to researchers via the Internet. In this way, the museum can do full justice to its fine holdings, and regain its position as an important centre for the study of how photography came to make such an impact on our visual and intellectual culture.

Notes and references

- 1 Ministère du Commerce et de l'Industrie, *Catalogue officiel des collections du Conservatoire National des Arts et Métiers*, Fifth Part, 'Arts graphiques – photographie, filature et tissage – mines, métallurgie et travail des métaux' (Paris: 1907), pp48–91; Conservatoire National des Arts et Métiers, *Catalogue du Musée*, Section L, 'Photographie Cinématographie' (Paris: 1949); Russo, F, *Introduction à l'histoire des techniques* (Paris: 1986), Part 3, 'Technique et Société', pp217–90
- 2 Corcy, M-S, 'Naissance d'une collection photographique', *Musée des Arts et Métiers – La revue*, 12 (September 1995), pp16–28; Corcy, M-S, 'Conférences sur la photographie au Conservatoire des arts et métiers', *Musée des Arts et Métiers – La revue*, 22 (March 1998), pp49–55; Ferriot, D et al., *The Musée des Arts et Métiers* (Paris: 1998), pp65–7; 'The Musée des Arts et Métiers', special issue of *Beaux Arts Magazine* (December 1999)