
PHOTOGRAPHY IN ARCHAEOLOGY AND CONSERVATION

SECOND EDITION

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THE EARLY DAYS OF ARCHAEOLOGICAL PHOTOGRAPHY

As with many scientific advances, photography was the result of the coming together of discoveries in several countries and the application of principles of physics and chemistry long known but not previously put to practical use.

The history of photography is well documented (e.g. Jeffrey (1981); a comprehensive account of early archaeological photography, especially in France, is given in Feyler (1987)), and there is no need to recount it in any detail here, nor to try to assess the claims that have been made for national priorities. Briefly, by 1838 L. J. Daguerre in France had developed a workable process for recording an image on silver-plated copper sheets; and by 1841 W. H. Fox Talbot in England had patented his 'Calotype' process whereby a negative image on silver chloride-impregnated paper was contact printed to give a positive image on a sheet of similar paper. In 1851 F. Scott Archer published an account of his invention of the collodion process, which made possible the use of a glass plate rather than a paper or metal base, thus increasing the effective speed and the range of tones of negatives. The plates had to be coated and used immediately, while still wet, a great inconvenience in field photography, and it was not until the 1870s that a reliable system of using bromide-gelatine emulsions – the dry plate – became available.

Photography began to be used for the recording of antiquities surprisingly early. In this country, Fox Talbot – himself an antiquarian, among many other things – took photographs of manuscripts, engravings and busts.

At this time archaeology was still very much influenced by antiquarianism, and there was little interest in the context or in the sequence of objects and buildings. Sites, and particularly classical sites, were regarded largely as a source of suitable exhibits for public and private collections, and the travelers, diplomats and soldiers who described, drew and, later, photographed them were rarely concerned with anything beyond the visible, standing remains. In the latter part of the century photography played a major role in the development of a more scientific, analytical approach to recording and excavation of sites. By its nature, photography was, and is, unselective; it records the background as well as the building, the deposit in which an object is found as well as the object itself. In addition, it was seen to be objective. Draughtsmen and scholars, in Europe at any rate, were trained in and were familiar with the classical tradition and when they moved beyond the Mediterranean they were apt still to consider and record artifacts –

particularly statuary – according to the classical canon. Photography did much to counteract this understandable bias.

By the 1850s archaeologists had begun to regard photography as a panacea, rather as their descendants a hundred years later were to regard C14 (radioactive carbon) dating, and much the same sort of disillusion followed when it was realised that such innovations were capable of distorting evidence. In 1852 the Trustees of the British Museum consulted Fox Talbot, Brooke (the Superintendent of the Photographic Department of the Royal Observatory) and Wheatstone (physicist and father of electro-telegraphy) regarding the possibility of photographing cuneiform tablets in the museum; and in 1853 Roger Fenton, at the invitation of the Trustees, submitted a report on the costs of building a glass-house and darkroom in the Museum grounds for the photography of artifacts by the Calotype process. The Museum's action had been prompted by the great number of artifacts, and especially tablets and inscriptions, that had arrived from Sir Henry Layard's excavations at Nineveh (Nimrud). These, it was felt, could be adequately studied only if photographs were distributed to a wide circle of scholars. Like so many subsequent schemes, this grand plan of recording and distribution ran out of funds part-way through, and was never completed.¹ Layard's books on Nineveh (e.g. Layard (1849)) had in fact been illustrated by engravings based on field drawings.

In 1854 the Society of Antiquaries appointed, at his own suggestion, Dr H. W. Diamond as Honorary Photographer to the Society, but he seems to have undertaken little photography on the Society's behalf thereafter (Evans (1956): 290–3). Also in 1854 the Society wrote to the Lieutenant General of the Ordnance of the British Army, then on its way to the Crimea, asking that 'the photographer who accompanies the army in the East may be instructed to take and transmit photographic views of any antiquities which he may observe'. Lord Raglan agreed to the request, although doubting that there were many ancient remains to be seen in Bulgaria, where the headquarters then was. No photographs materialised, although the photographer – the same Roger Fenton who had earlier been in correspondence with the British Museum – will always be remembered for his classic photographs of the battlefields of the Crimea, producing more than 350 negatives, the first ever to be taken in war conditions.

During the same period in France public interest in the new medium was intense, and public funding for its use in recording monuments and ancient sites was considerably greater and better organised than in this country. Baron Gros made daguerrotypes of the monuments of North Africa, and the first of the photographs of French architecture that formed the nucleus of the Archives Photographiques at Paris date from 1850. In 1851 the administra-

¹ I am indebted to Dr Julian Reade of the Western Asiatic Department of the British Museum for information on these transactions.

tion of the Beaux Arts sent photographers out to 'constitute the basis of a pictorial and archaeological museum' of the principal monuments (Philibert (1975)). An outstanding contribution to the early recording of ancient sites was the series of photographs of monuments in Egypt, Nubia, Palestine and Syria made by M. du Camp during his travels with Flaubert from 1849 to 1851. In 1851, L. D. Blanquart-Evrard opened a photographic printing works in Lille, using (without acknowledgement) a modification of Fox

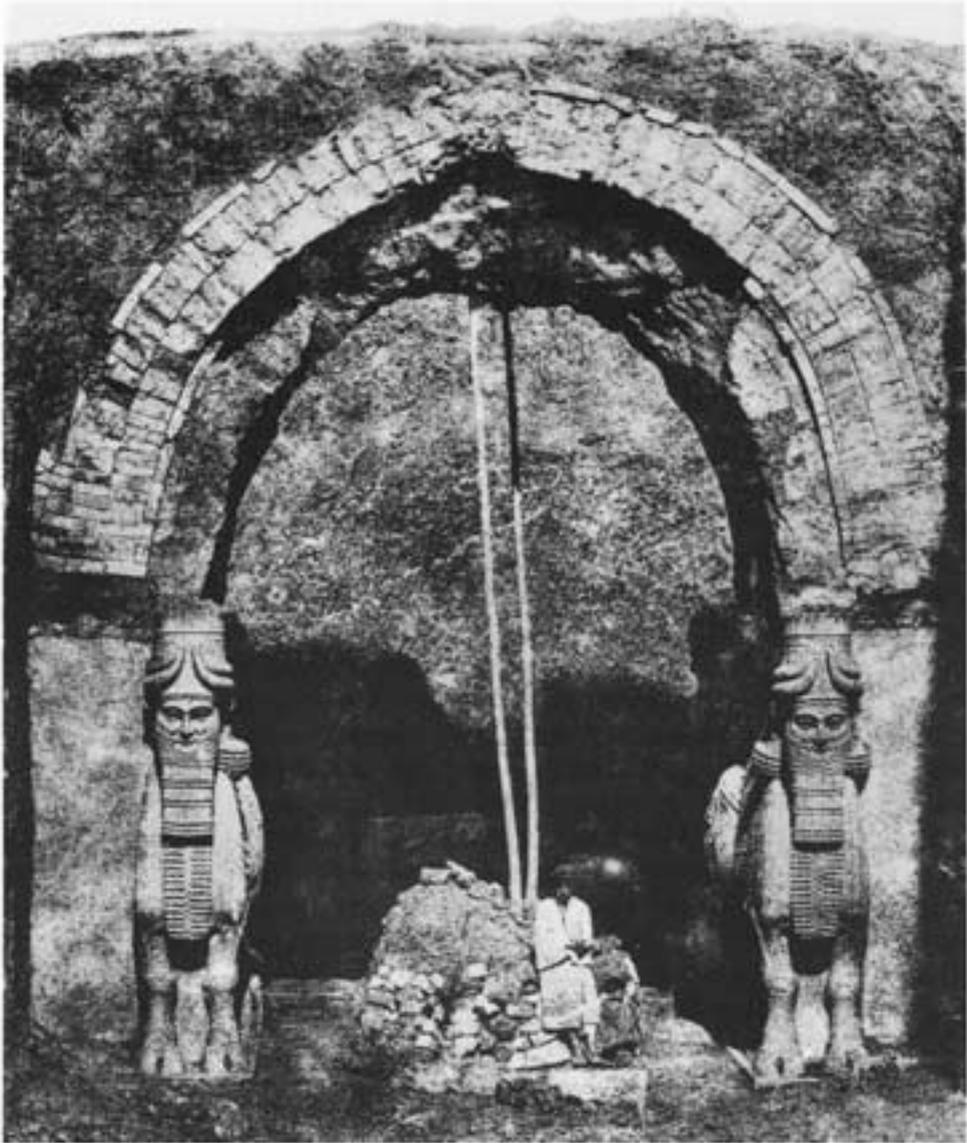


Plate 1 Gate at Khorsabad. Taken by M. Tranchand during Place's excavations, 1852–1855.

Talbot's Calotype process. He produced a folio of 125 of du Camp's photographs, which enjoyed a huge popular success and did much to make accessible the monuments of the East both to scholars and to the general public.

Probably the first archaeological expedition to use photography in the field was that of R. Lepsius in Egypt in 1842–45. Perhaps the most significant French work, however, from the standpoint of archaeological photography, was the series of photographs made by M. Tranchand during the excavations of V. Place in Assyria from 1852 to 1855 (Pillet (1962)). Place, the French Consul in Mosul, followed the discoveries of his predecessor in the post, P. E. Botta, by conducting the first excavations at Khorsabad, and recording the rock-cut figures at Maltaï and Bavian. Place and Tranchand also travelled through Armenia and Kurdistan and photographed the more picturesque sites. The first records were made by daguerrotype, but later the Calotype process was used. Although the original negatives seem to have disappeared after the Second World War, most of them were reprinted or copied in the



Plate 2 The Cnidus Lion. Lithograph based on a photograph taken during C. T. Newton's excavations, 1860.

1920s, and they had already been used as the basis for the engravings that illustrated Place's publications (Place (1867)). As can be seen (Plate 1), they compare well with many modern site photographs; there is sufficient raking light to record the detail of the brickwork and of the statues, the viewpoint has been chosen to show the depth of the arch, the level of the foreground and the top of the wall, and the photograph includes a figure to serve as a scale.



Plate 3 Archway at Samothrace. Albumen print from Conze's report on the excavations, 1880.

Photography also played a part in the expansion of interest in the Biblical sites of Palestine, starting with the work of A. Salzmann in 1854 and Captain Wilson's survey of Jerusalem in the 1860s. In Egypt in 1855 J. B. Greene made calotype photographs of his excavations at Thebes, and in 1865 C. P. Smith was the first to use magnesium flash lighting, in the interior chambers of the Great Pyramid (Feyler (1987)).

At about the same time, C. T. Newton was excavating in Greece and Turkey, and in his magnificent report (Newton (1862)), published within a year of the end of the excavation, many of the litho illustrations were directly based on photographs taken on site (Plate 2). Many of the plates were simpler and less cluttered than the one shown here, although most seem to include several pipe-smoking seamen and nonchalant midshipmen.

Probably the first report to use actual photographs and not lithographs or engravings derived from photographs (and it has also been called 'perhaps the first modern archaeological excavation account we have' (Daniel (1967, p. 143))), was that of Conze (Conze *et al.* (1880)) of his work at Samothrace. The publication includes gold-toned albumen paper prints tipped-in to the pages (Plate 3). They appear not to have faded in a hundred years, and the standard of photography is excellent. Certainly they equal, or surpass, the photographs in many present-day reports. Publications continued to be illustrated in this way, or by derived engravings or lithographs, for some years, and effective methods of photomechanical reproduction did not become widespread until the last decades of the century, although 'heliotypes' printed from collodion surfaces appeared some years earlier (e.g. Plate 4 from Pattison, (1872)).

In America, W. H. Jackson, the great photographer of the American West, made the first records of the Mesa Verde and other Pueblo sites of the South-western States in the years following 1870. In the 1880s, A. P. Maudslay, E. H. Thompson, T. Maler and others made extensive records of the buildings and monuments of Mexico; some of these photographs were of a very high standard, contributing to the great archive of the Peabody Museum. But systematic, scientific excavation was slow to start in the New World. During this period the looting and destruction of sites in the continent equalled that in Europe and the Middle East; and because the sites of North America in particular were generally smaller and more vulnerable than those in the Middle East, the process was even more destructive. It was really only with the excavations of F. W. Putnam in Ohio from 1890 onwards that photography in America became a tool of field archaeology rather than simply a way to illustrate the monuments.

During the last years of the nineteenth century and the first quarter of the twentieth, photography took its place as one of the standard techniques of excavation and of the recording of artifacts.

Although photographs of ancient sites had been taken from captive balloons as far back as the 1880s, the full potentialities of aerial photography

in the study of ancient settlement in the Middle East were realised only just before, and during, the First World War. The development of these potentialities in the interpretation of the less evident traces of sites in Europe in the 1920s was due largely to the work of O. G. S. Crawford in Wessex (a brief account of the development of aerial photography in archaeology is given in Daniel (1967), pp. 285–290).

The idea that site photographs should reveal every detail of the excavations as they proceeded, with sections precisely cut and meticulously cleaned, was, characteristically, propounded and insisted on by Mortimer Wheeler, and carried out by his photographer, M. B. Cookson, during their long association. However rarely achieved, this ideal remains central to the practice of archaeological photography today.



Plate 4 Handle of bronze vessel from Buitron. Heliotype illustration from *Archaeologia* 1872.