

ARCHAEOLOGICAL ARTEFACT PHOTOGRAPHY: DOCUMENTING OBJECTS, PROCESSES OR THEORIES?

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Abstract. Formal archaeological artefact photography is often distinguished from other genres of archaeological photography, viewed as a simple record aiming at a faithful representation of objects through the adoption of accepted practices, codes and conventions. Through the application of modern theories on the character and function of photographic images, in this paper it is argued that these images are not ‘objective’ representations but carriers of meanings that emerge through non-neutral processes of creation, dissemination and consumption. By shifting the theoretical focus beyond their content and including them in the wider corpus of academic and public photographic images of artefacts, we can design biographies of the objects and the theories on them, and study the production and dissemination of archaeological knowledge.

Keywords: Archaeology, Photography, Archaeological artefacts, Artefact documentation

1 Introduction

Photography is a key component of the discipline of archaeology. The complex relationship between the two is constantly evolving through time (extensive and systematic description in Baird 2011, Guha 2013, and Morgan 2016). As Bohrer argues, the invention of photography coincides with the cultural development described as “the invention of archaeology” (Bohrer 2015). Once Talbot attained the stabilisation of the image in the mid-nineteenth century, photography acquired the role of the “fixer” of knowledge and experience, as it was able to copy large amounts of data accurately and rapidly. Thus, photography was introduced as a new method of rapid transcription and circulation for scholarly purposes. At the same time, a large number of photographic reproductions of famous classical monuments produced by professional photographers or sightseers were widely available as individual photos or in photographic albums.

The acceptance of photography as a means of objective depiction of reality was based not only on the achieved outcome but above all on the way it was achieved. The process of producing the photographic image created the sense that for the first time, only an inanimate machine was intervening between the originating object and its reproduction, allowing the image of the world to be formed automatically without human intervention (Bazin and Gray 1960). This putative objectivity of the camera was thus used to confront doubts concerning the subjectivity of drawings. As the title of the first commercially published book illustrated with photographs, *The Pencil of Nature*, implied, photography gained a credibility which was missing from any other picture-making method. Archaeology and photography, both products of western modernism, shared the principles of visual proof of truth and objectivity (Hamilakis, Anagnostopoulos and Ifantidis 2009, Shanks and Svabo, 2013). Thus, in the next few years, photography was gradually established as a means of archaeological recording.

At the beginning of the 20th century, large-scale excavations created more specific needs in the depiction of archaeological information. The first informal rules of archaeological photography were established through the repetition of similar shots in different archaeological publications. During this time, the first theoretical discussions of the role of photography in archaeology appeared. The systematic use of a photographic measuring scale was part of this effort to ensure purely scientific and objective archaeological photography. In the second half of the twentieth century, as photographic technology rapidly evolved and new genres of archaeological photography, such as aerial photography, appeared, a number of manuals (e.g. Simmons 1969, Harp 1975, Dorrell 1989, Howell and Blanc 1992) attempted to systematise the methods and means of archaeological photography, aiming at the visualization of archaeological data with the greatest possible scientific rigour. In order to achieve

this goal, particular emphasis was placed on the immediacy and accuracy of the depiction, the use of established rules for each kind of archaeological photography (for example the use of a measuring scale and also an arrow to indicate north in archaeological landscape photography), perfect familiarity with the photographic equipment and techniques, and the careful preparation, isolation and presentation of the subject “with no distractions”. In this context, the staff are usually not depicted in excavation photographs and the objects are presented isolated from their background (Morgan 2016). The establishment and systematic recording of the photographic methods as well as the constant increase of archaeological publications led to the standardisation of archaeological photography.

2 Theoretical approaches to archaeological photography

Since the 1970s, an increasing interest in the study of image in science has developed, within a range of diverse disciplines such as visual studies, social anthropology, sociology, cultural history and history of sciences. The work of individual photographers and old photograph assemblages have been systematically studied and presented in publications and exhibitions. Within this context, in recent decades, new critical approaches of archaeological photography as a means of visual representation of archaeological data and presentation of archaeological interpretations have been presented (Guha 2013).

The assumed objectivity of photography was questioned and the perception of the photographic image as a direct window to the past considered simplistic and naive. The discussion of the role of photography in archaeology was no longer focused on its presupposed objectivity but on its rhetorical power (Bohrer 2015). Photographic images and visual representations in general were seen as meaning carriers, rather than transparent, neutral depictions of the real world. It was acknowledged that representation means constructing an accurate relational model rather than making a precise copy of a visual experience (Smiles & Moser 2005), with various factors influencing the recording of data and their perception by the public. Such factors include the technical constraints and the morphological and stylistic representation conventions of each particular archaeological tradition. In the discussions on the complexity of photographs, new study parameters were set, such as the materiality of the photographic object, the origin of the photographic significance, the creator’s intentions and ideologies, the ways of circulation and the different recipients of the photographic image, which is not considered individually but within a production, dissemination, consumption and recycling grid (Edwards and Hart 2004, Sassoon 2004, Smiles and Moser 2005, Loren and Baram 2007, Shanks and Svabo 2013).

The change in the theoretical approaches of archaeological photography coincided with the appearance and establishment of digital photographic technology. The mass digitisation of photographic archives, the appearance of digital cameras and later the incorporation of high-quality photographic hardware and software into everyday devices, such as smart phones, marked the transformation of the photographic act at the level of creation, preservation and access. Mobile phones were viewed not just as hybrid, multifunctional, internet capable devices, but as ‘sociotechnical assemblages’ (Shanks and Svabo 2013). In the era of online depositories, cloud computing, blogging and social media, the rapid increase in people who produce and consume digital images and the almost unlimited volume of the corresponding images has led to the use of new terms such as “visual literacy” and “image based culture” (Edwards & Hart 2004, 196-197).

The coming of the digital era has given rise to a series of new concerns regarding archaeological photography. Due to the difference in the materiality of digital and analogue photography, the initial issue that emerged was the need to redefine the nature of the digital photographic image, the production of which did not require a transition from the material phase of the film or paper, while continuous creation of exact copies without loss of quality was possible. Additionally, the new possibilities of digital photo processing have further destabilised the faith in photographic objectivity, transparency and truth.

3 Archaeological artefact photography

Archaeology is the science of the study of the human past through its material remains. Since its establishment as a distinct discipline, as its theoretical background was evolving and the theoretical focuses were changing over time, artefacts were treated either as the high art of a heroic past, or as typological elements for the creation of absolute and relative chronologies, signs of cultural diffusion, reflections of technological evolution, elements of social diversification, symbols of economic, social or ideological identity, symbolic prestige-items for elite groups, but also as objects that question history as written by the winners and provide us evidence of the silent majority who have not left any text-based histories (Chapman and Wylie 2005). Similarly, different categories of artefact - from unique masterpieces of art to discards or botanical and faunal remains - have occasionally been the subject of archaeological study in the context of a large repertoire of research strategies. Regardless of particular theoretical approaches, artefacts have always been at the centre of archaeological theory and practice. Correspondingly, the photography of archaeological artefacts has constituted the majority of archaeological photography.

However, even after the appearance and adoption of modern theoretical approaches for archaeological photography in general, such images are often distinguished from other genres of archaeological photography, being viewed mostly as simple records. Their role in the process of knowledge production and dissemination is often underrated or overlooked, and their assessment is simply linked to the adoption (or not) of accepted conventions of rigorous recording and documentation. Even today, they are often treated as one of the standard 'objective' methods of archaeological recording, such as the Munsell soil colour charts (Baird 2011). However, the accepted strategies and conventions of archaeological recording and documentation, as well as the technological capabilities of creation and dissemination of photographic images, have been constantly evolving since the establishment of the discipline.

Additionally, no matter how accurate the adoption of such rules, rigorous, complete objectivity is impossible to achieve, as it requires freedom from interpretive presuppositions (Chapman and Wylie 2005). The photography of archaeological artefacts, compared to other means of visual representation, such as drawing, provides an illusion of objectivity, neutrality and accuracy. But there is always an eye behind the camera, which directs what the viewer sees (Shanks 1997). Like other genres of archaeological photography, the photography of archaeological artefacts encourages particular interpretations and perspectives and conceals others through "coding" and "highlighting processes" (Van Dyke 2006). These processes start already by selecting the part of an artefact assemblage which is worth being or can be photographed. Such choices are related to the particular theoretical/interpretative model, but often even with practical conditions, such as the given economic budget for the publication of a project. Similar, intentional or unintentional processes also occur within the lifecycle of historical images, since some images are often destroyed, lost or just discarded (Loren and Baram 2007). A new set of choices is made by both photographers and archaeologists during the creation of the photographic image of an artefact. The selected view of the object (general view or a specific detail), the number of views, the camera angle, the light, the background and the manipulation of the image are some of these choices. At the publication stage, too, the number and size of the photographs to be ultimately used, their colour or black-and-white reproduction, their placement as figures within the text or as plates at the end of the book, the use of accompanying captions, are some of the decisions that must be made as part of a process for which Shank uses the term "montage", meaning the process of creating new juxtapositions by cutting and reassembling parts of meanings, images, things and quotations (Shanks 1997, 84). Thus, photography, no matter how formal it is, does not just capture the object but, going beyond that, presents what is considered most valuable in an object (Bohrer 2015).

The dissemination and consumption of published images is another parameter directly related to the rendering of different meanings in particular images. The creators of archaeological images address a specific audience, equipped with the necessary cognitive background and familiar with given communication conventions. However, many of these photographs are disseminated to a wider public than originally targeted, through their print or online circulation. School books, tourist guides, even advertising posters and brochures, blogs and social media are some of the hosts of artefact images.

Based on the above, formal photographs of archaeological artefacts are records aiming to create a neutral image, but they are products of non-neutral actions. They are an important part of an evolving communication

code through which the participants negotiate the meaning of the artefacts (Bateman 2005). In this sense, formal photographs of artefacts, as well as other genres of archaeological photography, cannot be dealt with as just a scientific procedure but rather as a cultural construction (Baird 2011), as one of the ways the past is depicted and interpreted, and knowledge is constructed, represented and disseminated.

4 The content of the image

The content and the original purpose of the image are, undoubtedly, fundamental to all photographs, and, therefore, to the formal archaeological photographs of artefacts, as they are the reason these photographs are created. Therefore, the adoption of accepted modern standards of archaeological photographic recording should be strictly followed, aiming to achieve maximum reliability in the rendition of the geometry, the colour, the texture, the material, the morphological and functional characteristics of the artefacts. However, the limitations on the achievement of "neutrality" in archaeological recording as well as the complexity of the functioning of the images, through complex processes of creation, circulation and consumption, should not be underestimated. Additionally, a methodological approach considered acceptable at a given time, which determines what is worth studying and therefore photographing, is likely to be considered incomplete or obsolete in the future. Within this context, apart from the documentation of the artefacts, the process of photographic documentation itself should be adequately documented. What exactly was photographed in an archaeological project, how it was photographed, and what the aim was, are necessary data for evaluating methods and results in the future. Such metadata allow the historical delimitation of images and the understanding of the processes that led to their production.

5 Beyond the content

Accepting the limitations and complexity of formal images of archaeological artefacts eradicates the separation of these 'simple, standard record shots', which are commonly used as data, from the other genres of archaeological photography, which are investigated as complex information carriers. With the abolition of this separation, such images can be viewed as parts of a wider corpus of photographic images focusing on an artefact. Other genres of academic and public archaeological photography can be included in the same corpus in order to study the biography of artefacts and theories. The prevailing tendency, at least until recently, is that formal artefact photographs are created by a simple visual act; therefore they are a simple depictive device. This view has led research to focus exclusively on the dominance of image content in order to find the best and most objective ways to ensure a neutral depiction of artefacts. Beyond the content, the materiality of the photographs translates the abstract and representational 'photography' into 'photographs', as objects that exist in time and space. By shifting the methodological focus to other parameters such as the presentational form of the content, the physical attributes of these images and their lifecycle (intention, creation, circulation, consumption, rejection, recycling), these photographs can be studied as socially salient objects and as agents of knowledge and shaping of perceptions, whether social, national, cultural or other (Edwards and Hart 2004).

Beyond the official, tightly controlled archaeological record, new approaches to photographic production have been introduced over the last few decades: photographic snapshots of archaeological processes and creative photography between artwork and visual ethnoarchaeological commentary (Shanks 1997, Bateman 2005, Hamilakis, Anagnostopoulos and Ifantidis 2009). On the other hand, public forms of photographic representation, including those 'related to the amateurism of tourists and the superficial gaze of journalists' (Hamilakis, Anagnostopoulos and Ifantidis 2009, 287), illustrate the relationship of artefacts with wider age, social, national or other groups.

Moreover, the reproducibility of the photographic images in archives (Punzalan 2014), printed scientific or public editions (museum guides, albums, tourist brochures, postcards, media, etc.), and also on a variety of modern on-line media, allows the study of complex dissemination routes, the detection of the "genealogy of a photographic image rather than the biography of a unique photograph" (Riggs 2016, 267, Guha 2003). The study

of the corpus of the different depictions of an artefact allows us to study its biography, its course in time. Obviously, this course cannot only be related to the artefact's physical condition and the study of the materials and methods applied in excavation, conservation and storing. Images of the past often survive longer than the theories in support of which they have been created (Smiles & Moser 2005), and, therefore, through them a number of important issues can be studied. Some of these issues concern the artefacts themselves, e.g. the meanings attached to them by the academic community or the wider public and the evolution of their position in archaeological and museological science. Other more general issues are the relationship of people, artefacts and images and the role of archaeological photography in the creation and dissemination of knowledge.

6 Conceptual approach

Different conceptual models have been proposed for the description of photographs and photographic images, on occasions such as the documentation of photo archives or the establishment of relationships between diverse types of cultural object owned by related cultural institutions, e. g. photographic images and paintings (Daquino et al., 2017). However, regarding the process of data from different fields and also the study of complex issues through the analysis of large image assemblages, a broader conceptual model should be developed, which will take into account the concerns mentioned above.

The development of a new, complete conceptual model is not the intention of this short paper. This paper aims to discuss the character and the role of archaeological artefact images and to suggest ways of approaching them. Within this context, the main concepts are presented here. The CIDOC Conceptual Reference Model (Version 6.2.2), a well-established standard for cultural heritage documentation, and its extension CRMdig (Version 3.2.1) were used. The presented classes follow the CIDOC-CRM model conventions: E and P denote CIDOC-CRM classes and properties, D denotes CRMdig classes:

- E22 Man-made Object. The artefact: the basic entity represented in a photographic image
- E38 Image. The content of the photograph: the artefact and the additional elements (E1 CRM Entity) that may be depicted (complementary elements such as measuring scales, other artefacts, people, places, procedures in the artefact lifecycle - excavation, conservation, restoration, museum display, etc.).
- E84 Information Carrier and D13 Digital Information Carrier. The carrier of the photographic image: either photographic objects (printed photographs, slides, negatives, digital images, etc.) or other image carriers (scientific or public printed publications, brochures, newspapers, web pages, etc.).
- E7 Activity. The processes applied to an image or photo: creation, modification, notes or comments, publishing, reproduction, etc.
- E39 Actor. People involved in activities in the lifecycle of images or photographs (agents, creators, image and photograph users / photographers, archaeologists, conservators-restorers, etc.).

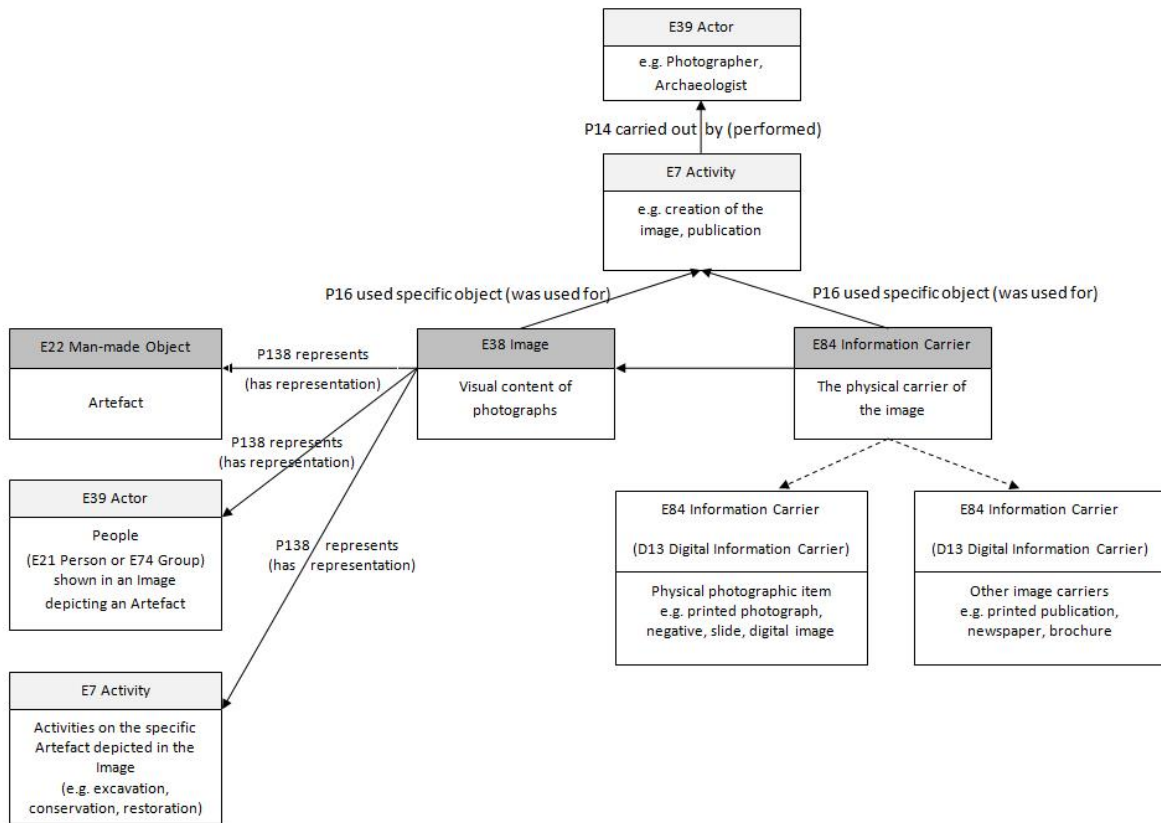


Fig. 1 Basic classes and properties

7 Conclusions - Future work

Through the discussion of a series of issues related to photography, archaeological theory and methodology, it has been argued that typical archaeological photographs of artefacts should not be treated as a faithful description and an obvious, neutral archaeological record. Like all other genres of archaeological photography, they are meaning carriers; they do not just represent but also interpret. Through a framework of choices, they are created for a specific purpose, disseminated and consumed by a specific audience. In their lifecycle, they often survive longer than the theories they were created to support, they circulate and incorporate different meanings. By highlighting the different roles of the formal archaeological photographs and the realisation of complexity in the relationships between artefacts, images and people, these photographs can be included in a wider image corpus for the study of both the biography of the artefacts themselves and wider issues such as the production and dissemination of knowledge and ideology.

In future work, different assemblages of images of archaeological artefacts can become study cases. Such assemblages could be, for example, the corpus of images of a particular artefact in various carriers and the corpus of images of archaeological artefacts in a particular image carrier (a specific archaeological publication or a group of archaeological publications of a particular era or a theoretical approach). Through such different study cases, the theoretical and conceptual approach proposed can be evaluated and expanded in order to develop a complete and reliable conceptual model for the description, management and study of the images of archaeological artefacts.

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