



SPAFACON2021

**Papers from the SEAMEO SPAFA International Conference on
SOUTHEAST ASIAN ARCHAEOLOGY AND FINE ARTS**

13 - 17 December 2021

Editor: Noel Hidalgo Tan

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INTRODUCTION

This volume contains the extended abstracts from the papers presented at the SEAMEO SPAFA International Conference on Southeast Asian Archaeology and Fine Arts, which was held online from 13 to 17 December 2021. Also known as the SPAFACON2021, this conference was organised online due to the pandemic. Despite the disruption brought about by Covid-19 to our in-person events, training programmes and field research, it is heartening to see that archaeology and cultural heritage has continued under new modes of communication and collaboration.

This fourth iteration of the SPAFACON is also scheduled a year earlier than our usual triennial cycle to commemorate the 50th anniversary of SEAMEO initiating a centre dedicated towards archaeology and the fine arts. Over the past year, SPAFA has also been highlighting this legacy of international cooperation and capacity-building by sharing our photographic archives on our social media.

I am delighted by the high level of enthusiasm and intellectual curiosity brought by the participants to the conference. During our call for papers we received close to 90 submissions, but owing to the pressures of time and the online format, we were only able to accept 34 papers for the conference. The variety of papers present here, although a small set compared with our usual proceedings, reflects the breadth of the centre's ambit – covering not just archaeology, but also performing arts, visual arts, museum studies, and other aspects of Southeast Asian cultural heritage.

I would like to thank all the participants, without whom this conference would not be possible in its present form, in particular, our Governing Board members who represent every country in Southeast Asia, and to the Ministry of Culture, Thailand and the Ministry of Education, Thailand for their long-standing support of SEAMEO SPAFA and its activities.



Mrs Somlak Charoenpot

Centre Director

SEAMEO SPAFA

Photography in Indonesian Archaeology of the 19th to the Early 20th Century

Fotografi dalam Arkeologi Indonesia pada Abad ke-19 sampai Awal Abad ke-20 Masehi

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Abstract

In Dutch East India, photographic documentation for antiquities was as up-to-date as in Europe that was developed in the last half of the 19th century. Photography became a tool for archaeological surveys which resulted in thousands of enormous resources. In this paper, the historical background regarding how these old photographs were collected and how the material circulated within archaeological activities will be elaborated. The timeline studied is limited to pre-independence Indonesia with the subject mostly focused on Hindu-Buddhist remains. The method used is literature review of both relevant new publications as well as significant old publications. It turns out that photographic surveys of archaeology in Indonesia during the colonial period developed from early archaeological activities into systematic institutional programs. The qualities of photography were appreciated in miscellaneous application and offered substantial benefits. Photography became a documentation medium, publication complementary, archive, and object representation and substitution. This historical background of photography in the context of Indonesian archaeology marks the significant value of these photographs so that it can be the foundation of preservation for the future.

Di Hindia Belanda, dokumentasi fotografis pada tinggalan purbakala sangat mutakhir sebagaimana di Eropa yang dikembangkan sejak paruh terakhir abad ke-19 M. Fotografi menjadi perangkat untuk survei arkeologi yang menghasilkan ribuan sumber daya. Dalam tulisan ini, latar belakang sejarah terkait pengumpulan foto lama tersebut serta penggunaannya dalam berbagai aktifitas arkeologi akan dijabarkan. Lini masa yang dikaji dibatasi pada Indonesia pra-kemerdekaan dengan subjek yang berfokus pada tinggalan Hindu-Buddhis. Metode yang digunakan adalah kajian pustaka, baik terbitan terbaru yang relevan maupun terbitan lama yang penting. Ternyata survei fotografi pada arkeologi Indonesia selama periode kolonial berkembang sejak aktifitas arkeologis yang masih dini hingga menjadi program institusi yang sistematis. Kualitas fotografi juga diapresiasi

dalam beragam penerapan serta menawarkan manfaat yang substansial, Fotografi menjadi media dokumentasi, pelengkap publikasi, arsip, serta representasi dan substitusi objek. Latar belakang sejarah fotografi dalam konteks arkeologi Indonesia semacam ini menjadikan nilai penting dari foto-foto tersebut sehingga dapat dijadikan fondasi dalam pelestarian untuk masa depan.

Keywords

Photography; Indonesian Archaeology; Archaeological Photograph

Fotografi; Arkeologi Indonesia; Foto Arkeologis

Introduction

The almost same period between the flourishing of scholarly attention to ancient art through archaeology and the invention of photography predestined that these two breakthroughs will have a mutualistic future. The new invention arrived with unique attributes to illustrate archaeological activity (Shank and Svabo, 2013, 89-90). No wonder that W.H.F. Talbot himself even recommended photography for archaeological purposes in his *Pencil of Nature* (Bohrer, 2011, 223). In Europe, photography in archaeology was intensively used from the last half of the 19th century onward. In that period, photography began to be a popular tool of documentation for archaeological finds (Shanks and Svabo 2013: 90). The interconnection between photography and archaeology was then exported outside of Europe. In Indonesia, photography was brought by the direct connection with Europe through colonization in such a prompt stage. Both government institutions and private society contributed to initiate a serious effort in documenting vast Indonesian antiquity. This continuous effort resulted in an enormous amount of photographic archives. Today, the archives are preserved in various institutions both in Indonesia and the Netherlands. However, in the current context, these photographs aren't mere documentation of the real object as probably had been addressed in its original purpose. More high-quality photographs can easily be obtained from today's advanced technology. The historical background of the old photographs is what makes them valuable (Caraffa 2019: 38).

In this paper, the historical background of photography in Indonesian archaeology before independence will be elaborated. There will be two main ideas presented. First is the actual aspect of how the photograph was introduced, which also explains the phases of photography in Indonesian archaeology during the colonial period. Second is the conceptual aspect regarding the quality of photography to explain how photography circulated in archaeological needs. Any effort related to photography in archaeology during the colonial period was mostly done by Dutch scholars, who were indeed concerned especially with Hindu-Buddhist influenced Indonesian remains. Hence, it only represents

classical archaeology rather than archaeology in general. Literature review is the main method used. Both recent publications with relevant topics and publications from the 19th until the early 20th century supplement the conclusion. From the overview of the past done in this paper, what has become the early basis of the development of Indonesian archaeology can be reflected for the present and the future.

Discussion

The History of Photography in Indonesian Archaeology before Independence

As in Europe, photography in Indonesia started to develop in the 1840s. The initiative was brought by the colonial government, but soon after many individual photographers also came to the country, attracted by the potential market. The business to take portrait photographs of European, Chinese, and local upper-class families grew significantly throughout the decades of the 1850s and afterward. The photographic studios and private companies like Woodbury & Page and Charles & van Es emerged during the course of the 19th century. First in Batavia but then followed soon after in the cities across the colony (Wachlin 2008: 739-741). Along with the improvement of photographic technology, the involvement of photography in the business sector as well as any other sectors kept continuing. However, photography related to archaeology was the one that became the earliest concern and gained serious support in the later development.

In 1840, only a year later after the announcement of daguerreotype, the first functional photography, J. Munnich experimented with the new invention to landscape, architecture, and antiquity in Netherland East India (Wachlin 2008: 739). But this initiative was faced with tropical environment challenges which made the result somewhat disappointing (Boonstra 2009: 362-366). Hence, German photographer Adolf Schaefer, learned first-hand from Louis Daguerre in Paris, was then entrusted as a more competent photographer to bore such duty. In 1844, he photographed some collections in the Royal Batavia Society of Art and Science or *Bataviaasch Genootschap van Kunsten en Wetenschappen* (BGK) and by the next year commissioned by the Ministry of Colonial Affair to handle the first capture ever of the great Borobudur. His project wasn't continued due to the high cost (Boonstra 2009: 362-366; Mansfield 2019). It seems that daguerreotype, which used silver plates, was not suitable to be applied in Java both expense and environment-wise. Colonial government was then back to using drawing to document the Borobudur reliefs, which was done by F. C. Wilsen in 1848 (Boonstra 2009: 365).

The invention of negative processes, such as calotype by W. H. F. Talbot in 1841 and wet collodion by F. S. Archer in 1852, revolutionized photographic technology. The

exposure time was shortened, the negative able to duplicate multiple copies, and the positive was printed on paper (Wachlin 2008: 239). In the case of wet collodion, the result was detailed, the chemical can be processed in the lab before it was brought to the field, and the materials were cheaper (Wachlin 2008: 1486). The new technology was hope for hampered archaeological documentation in the Netherland East India. This hope was brought back by I. van Kinsbergen, a photographer who was formerly an actor. His first assignment was done in 1863 to photograph several Javanese antiquities under the command of J. F. G. Brumund from BGK (Boer, 2002, 32) and continued the Borobudur project in 1873 (Boonstra 2009: 367). From 1862 until 1872, he made 368 photographs of ancient temples and statues (Hinzler 1993: 34). His work was considered as decent and had the taste of art which pleased the board of directors of BGK (Boonstra, 2009, 367).

Kinsbergen's success paved the way for more extensive archaeological documentation. The growing photographic trend was not limited inside the museum or particular site. Photography was also used in archaeological field research which was also popular during that time. In 1889-1890, local archaeological association, *Archaeologisch Vereenigings te Jogjakarta*, hired already famous photographer, Kassian Cephas, to handle the documentation of their archaeological excavation in Prambanan temple supervised by J. Groneman. In the same year as Prambanan excavation, he was hired by J. W. Ijzerman, also a chairman of the same Archaeological Association of Yogyakarta, to handle the phenomenal finds, the hidden base relief of Borobudur temple. He took 160 photographs of relief on the hidden base using wet collodion process (Fontein 1991).

The role of pioneering individuals such as Schaefer, Kinsbergen, and Cephas, commissioned by disparate societies, characterized photographic efforts for archaeology in the last half of the 19th century. One of the significant impacts resulting from a determined photographing effort during this time, especially of Borobudur, was attention from the community in Europe. After the 1900 World Exhibition in Paris, Dutch government was forced to put more serious regard on Indonesian antiquity. Finally, a temporary committee consisting only of three members to handle antiquity In Java and Madura was initiated in 1901 with its first chairman J.L.A. Brandes (Soekmono 1969: 94-95).

The foundation of *Commissie in Nederlandsch-Indie voor Oudheidkundig Onderzoek op Java en Madoera* (OC) and followed by its broader successor of *Oudheidkundige Dients in Nederlandsch-Indie* (OD) twelve years later, marked the established systematic phase of archaeological photography as part of the institution's project. From 1902 onward, photographs taken by OC and OD were inventoried with the sequence number

of photographs being taken and published through annual report (Hinzler, 1993, 34-35). During the OD period, not only photographic inventorying was continued, as literally shown by inventory number, but the scale and the scope were broadened. Throughout 1913-1949 antiquities across the archipelago were surveyed. The subject also became more diverse with addition of prehistoric, Islamic, and colonial archaeology (Soekmono, 1992, 8). The list of photographs published in *Raportten van OC* (ROC) and *Oudheidkundig Verslag* (OV), OC and OD annual report, were varied in object from metal and stone statues to temples architecture and ornament. The photographs were taken on various occasions. Survey or inventory on site, private collection, and museum became the most common instance. Other than that, restoration also produced huge number of photographs. For examples were Borobudur restoration under the supervision of Van Erp in 1907-1911 with J.J. de Vink as photographer (Erp, 2016, 2) and several temples reconstruction when OD was under the supervision of F.D.K. Bosch in 1916-1936 (Soekmono, 1992, 3-9). In 1912, the last year of OC, photographic negatives stored by OC were reached 1498 in number (OC, 1913). Meanwhile, the total of photographs taken by OC and OD is more than 25,000 pieces (Hinzler, 1993, 35). As for photographers during the centralized institutional period, H. L. Leide Melville had already been mentioned in the first report from 1901 (OC, 1904). Along with J.J. de Vink, it seems that they became the main photographer of OC and continued in OD until at least 1932. However, the majority of the photographer remained anonymous (Kempers, 1959). In 1925, Dutch government gave the photographs to the Kern Institute, founded by N.J. Krom and J.P. Vogel in 1924. The Kern Institute then became the holder of these photographs afterward. Under the Kern Institute collection, the term OD-photograph was used to refer to the photograph series taken by OC and OD and the term became popular since then (Boer 2012).

Preservation of these old photographs must be attributed to several institutions. Early photographs taken by Schaefer and Kinsbergen are kept by KITLV and housed at Leiden University Library since 2014 (Mansfield 2019; Leiden University Libraries 2019). Meanwhile, 158 original collodion negatives of Borobudur photographs taken by Cephas are held by Tropenmuseum (Boonstra 2009: 361). Leiden University Library holds 21,855 of OD-photographs given by the Kern Institute in 2010 (Boer 2012; Hinzler 1993: 35). Meanwhile, about 6000 glass negatives of OD-photographs left in Indonesia are stored in the National Gallery building under the supervision of Directorate General of History and Archaeology (Tjandrasasmita et al., 2009, 9-10).

The Use of Photography in Indonesian Archaeology before Independence

In Indonesia during the colonial period, real archaeological research came to light in the 19th century, especially in the last two decades, when various societies and their early scientific activities concerning archaeology flourished. From this period, papers about cataloguing and description of Javanese antiquities were published (Soekmono 1969: 93-94). Indeed, the main theme in the early period was general survey as continuation from an initiative done by pioneers in the 18th century. Photography, which was introduced at the same time, at first became the perfect tool for documentation. But, effective technique of documentation was not the only value appreciated within the connection between photography and archaeology (Shank and Svabo 2013: 90). The broader values consist of a set of intrinsic and extrinsic qualities of photography that are adequate for archaeological activity.

The mechanical process of photography reduces the subjectivity as found in traditional illustration and results in an almost equal duplication as the real object (Klamm 2017: 54). This fidelity of photography was what made it entrusted as documentation in the first place and remained relevant. But, as a new invention, the quality of photography was compared with traditional illustration in the last half of the 19th century. Line drawing, such as those drawn by Wilsen in 1848, failed to provide objectivity since the artist's subjectivity took a lot of roles in the process. On the other hand, some archaeologists considered that line drawing was already adequate to provide artifact images and thought photography as giving false objectivity (Klamm 2017: 52). The objectivity of photography was questioned within the scholarly discussion mainly because photography itself was such a dynamic tool. Archaeologists often selected photographs in their publication in order to gain aesthetic quality and reconstruct the imagination of an object within a new context (Bohrer 2011: 225-228). Meanwhile, the intervention of photographer's taste also could not be understated. Regarding the last case, Kinsbergen's photographs with intended placement and lighting, albeit got a lot of praise, were shown to be more of artistic piece itself rather than objective archaeological documentation (Boonstra, 2009, 370-371). Nevertheless, improvement of photographic record, both of technique and technology, also existed and achieved a more natural view and gave a sense of scale as necessary for archaeology. For instance, there were OD-photographs from the 20th century. The quality of line drawing and photography was also equally appreciated for different purposes and coexisted in the 20th century. Brandes' paper about the throne in Sewu, Kalasan, and Mendut temples, published in ROC 1904, used both photography and drawing to depict each throne in order to get benefit from both methods (OC, 1906). While photography may show fidelity of the throne, line drawing gives the impression of a clear image like an architectural blueprint.

Brandes' paper also gives an example of how photography became a pictorial reference in archaeological publication. In Netherland East India, even though Kinsbergen published his photographic series as portfolio in 1875, but archaeological publications from the 1870s and the 1880s such as *Boroboedoer op het Eiland Java* (1873) by C. Leemans and *Catalogus der Archeologische Verzameling* (1887) by W. P. Groeneveldt did not yet include any complementary photographs. Traditional illustration was still preferred as shown by Leemans (1873) which included C.F. Wilsen drawing instead. While for Groeneveldt (1887), he only mentioned a list of photographs by Kinsbergen as reference. By the 1890s, photographically illustrated books were made more accessible with the development of photomechanical technology (Denny 2008: 192). The idea of photography as pictorial reference of a text was actually born together with photography itself, but the practice of directly pasting original photographs on a book was scarce if not impossible. Hence, the methods of reproducing photographic print onto paper, so called photomechanical-print, was formulated in a different branch of experiment from the still developing of photography (Denny 2008: 192-193; Hamber 2008a: 189-190, 2008b: 191; Hannavy 2008a: 187, 2008b: 188-189). During the last half of the 19th century, many other methods of photogravure and photolithography were invented through modification from the principle of already mature traditional printing (Cycleback 2008: 1117; Nadeau 2008b: 1112-1114). One of the most important results was Alphonse Poitevin's invention in 1855 as the first practical process of photolithography using dichromatic gelatine, collotype (Nadeau 2008a: 313).

Publishers such as Martinus Nijhoff in the Hague and E.J. Brill in Leiden has facilitated book illustrations with collotype since the 19th century. Collotype became popular because of its ability to copy photographs in almost identical quality as the original (Nadeau 2008a: 313-314). J. Groneman's report of the excavation in Prambanan, *Tjandi Prambanan op Midden-Java* (1893), became the early example of a photographically illustrated book with collotype of Cephas' photographs. *Beschrijving van Barabudur* by N.J. Krom (1920) and Th. Van Erp (1931) also included more than 300 photographs from 1907-1911 restoration printed separately in three folios (Soekmono, 1992, 3) probably used collotype as mentioned in its English version. N.J. Krom indeed intensively used photographic print in his publications. His famous *Inleiding tot de Hindoe-Javaansche Kunts* (1920) was complemented with 58 plates within the text. Photomechanical-print of OD-photograph also illustrated periodical publications such as BGK magazines (Tjandrasmita et al. 2009: 9). Meanwhile, OC had already used photographic print since their first report in 1902 (OC 1904). Even though without full consistency, OD also frequently embedded photography in their report until their last report in 1949 (OD

1950). During the 20th century, photomechanical-printing technology was available in local publishers such as Albrecht & Co. from Batavia and A.C. Nix & Co. from Bandung. The mobility of photography, either as negative, original copy, or photomechanical print, gave this object the value of accessibility. This value was appreciated in archaeological research because the provenance of archaeological data was naturally scattered or inaccessible due to conservation reasons. Hence, photography was often used as the substitution if that was the only source available related to the data. J.H.C. Kern in 1895 used Cephass' photographs to decipher the inscription on the hidden base of Borobudur (Boonstra 2009: 376). In the context of Indonesia during the colonial period, photography also connected the scholars in the Netherlands with their interest in Indonesian antiquity which was separated by distance. A.J. Bernet Kempers' famous work, *the Bronze of Nalanda and Hindu Javanese Art*, used OD-photographs of Javanese bronze statues from Kern Institute (Kempers 1933: 16). Except for some collections in Leiden Museum, most statues he analysed counted on their photographic reproduction since this work was finished in 1933 before he came to Indonesia in 1936.

In the field of style like Bernet Kempers' thesis, the use of photographic data as substitution for art objects was discussed even more. The main question was whether photography was capable of representing the real object as reference for analytical purposes in the study of art. Indeed, photography depicted the natural state of an object through mechanical process, but even since its early emergence, photography was criticized for the shift of the dimension and the fade of image outline, which became an important formal element (Klamm 2017: 50-54). For archaeologists who supported the use of photography, the argument was that photography simplified an object by focusing on the object's formal value. The photograph serves the detail and accuracy in which any other representation failed to provide (Bohrer 2011: 225; Klamm 2017: 55-56). Photography is also valued because it opens up the possibility of comprehensive comparison through different copies of photographs (Bohrer 2011: 224; Klamm 2017: 54-55). Comparison is an analytical tool that is useful in the study of style to distinguish or grouped an object into categorization. Bernet Kempers *the Bronze of Nalanda and Hindu Javanese Art* was one of the best cases about this issue related to Indonesian archaeology. Both the bronze statues from the Nalanda hoard and its Javanese counterpart were analysed based on their photographs. From formal analysis of individual statues as well as comparison of overall statues, he successfully distinguished different styles in Nalanda and Javanese bronzes. He concluded that the bronze in Nalanda belonged to Pala style and produced in India, juxtaposed with previous argument which said that the bronzes from Nalanda were produced in Java (Kempers 1933: 7).

Such as comparability, photography collectively also offered capacity as visual exposition in the form of archive (Bohrer, 2011, 224). Photography has been a key component in the modern archival system since the 19th century (Shank and Svabo 2013: 98). Since the inception of photography in archaeological activities in Dutch East India, photographic archives have almost become assured in every output. The accumulation of photographs was useful in many practical things. One instance is that photographic assemblage has been proved as capable to reconstruct fragmented pieces of architectural elements into its complete appearance (Caraffa 2019: 38-40). Photography offers benefits since it conserves the pre-transformational condition that is useful for future restoration (Hinzler 1993: 35). The reconstruction of Siwa temple in Prambanan complex, initiated in 1918 and inaugurated in 1953, provides a good example. Not only that the remains had decayed naturally which stimulated the debate about the possibility of reconstruction, the effort was complicated by 1889 bungling cleaning work which removed the stone blocks from its original place. Hence, the restoration was begun with sorting the stone in order to arrange the structure. Local overseer helped to identify the ornamented stone through detailed sorting and put it with other fragments in partial reconstruction (Romondt 1996: 175-178). Cephas' photographs from 1889-1890 pointed out the state of the temple before the cleaning while new photographs were captured to show the progress as well as to help the sorting and partial reconstruction. Documentation during temple reconstruction that built a neat photograph archive was indeed OD's praiseworthy effort. Some to mention are Panataran complex in 1917-1919 (OD 1917), Plumbangan temple in 1921 (OD 1923), Ngawen temple in 1925-1926 (OD 1928), and of course Prambanan complex which photographs are found quite consistently from OV 1920 until OV 1939 (Soekmono 1992: 5).

The multi-aspect contribution of these old photographs in the development of Indonesian archaeology enriches their significant values in the current context. The photographs are the record regarding how technology supported the establishment of Indonesian archaeology since its very early stage (Tjandrasmita et al. 2009: 9). The historical background of the photographs also stimulate research questioning miscellaneous discourses of Indonesian archaeology during the colonial period. For examples are the political motivation behind colonial government support on enormous documentation of Javanese antiquities or the role of photography of antiquities in reshaping Indonesian cultural awakening. Last, in the eyes of conservation, old photographs in some cases become the only possible source to investigate how a monument was built and identify the detail of decayed artifacts (Hinzler

1993: 35). The overall significant values regarding the photographs become the principle for present conservation and development effort of the material so future generations may still appreciate them.

Conclusion

As a relatively new technology, photography was used for archaeological objects in Indonesia even when archaeological activity was still in its embryonic phase. Throughout the development, photography transformed from its original function as a documentation medium into object representation with wider application. Today, these old photographs remain relevant either because of their intrinsic qualities or significant values. In fact, with other new photographs, these resources have the potential to become the building blocks of rich cultural archives accessible worldwide in their digitized and online form. Photography as a tool that properly treats antiquities also supported the development of Indonesian archaeology. In general, the implementation of photography by the colonial stakeholder reflects how the fruit of technology was utilized for the advantage of archaeology. Reviewing the historical background of photography in Indonesian archaeology should be able to trigger Indonesian archaeologists, both as personal or institution, to maintain relevance with new technological breakthroughs.

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