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CULTURAL REPRESENTATION AND DIGITAL
REPRODUCTION: A CRITICAL ANALYSIS OF POST
CONFLICT REPRODUCTIONS OF HERITAGE

Dissertation submitted to Universidade Católica
Portuguesa to obtain a Master's Degree in Culture
Studies: Management of the Arts and Culture

By

Leonie Rose Davidson

Faculty of Human Sciences

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ABSTRACT

With the advancement of technological methodologies we are reconsidering our past and how to preserve it. The intersection of technology and heritage demonstrates how the past continues to live in the present and the ability to reconstruct and preserve heritage, something pertinent within the contemporary context of worldwide conflicts. The ability to digitally reproduce heritage is novel and something which requires further inquiry in light of several considerations. These are mostly questions of authenticity and whether a copy can (or should) replace the original structure. This is because of several implications involving ownership and access (i.e. whether it is democratising art and heritage), effects of removing it from its geographical and cultural contexts and the complexities of cultural representation in the digital. To investigate this emerging topic, I am analysing both the theoretical and practical implications of digitally reproducing cultural heritage post conflict. The ramifications of recreating heritage post conflict, after the destruction (iconoclasm in specific) of the original artefact within the unstable context of war, are numerous. For instance, the erasure of history is thrown into question with the recreation of war-destroyed heritage, as well as the very decision of which artefact are chosen for reproduction. Consequently, my main research questions will be exploring what it means when the 'original' is destroyed and a 'copy' is created in its place, what happens when digital reproductions become viral and/or physically travel the globe; who 'owns' the reproduced digital heritage and what does it contribute to discussions on representation? Therefore, I am addressing both the importance of cultural heritage in contemporary society and its representational role. To do so I am drawing on theoretical concepts from the disciplines of Cultural Studies, Heritage Studies, Museology and Anthropology to analyse the complexities of political, cultural and historical representations. Using the empirical case studies of three post-conflict sites of The Triumphal Arch of Palmyra (Syria), the Bamiyan Buddhas (Afghanistan) and the Lion of Mosul (Iraq), I address their digital reproductions in consideration of cultural representation and the role of heritage respectively. Ultimately, I am using these three case studies to attempt to address the problems and benefits involved in recreating heritage after the original has been destroyed in conflict.

Key words: Heritage; Colonialism; 3D reproductions; Cultural representation; Authenticity

RESUMO

Com o avanço das metodologias tecnológicas, estamos a reconsiderar o nosso passado e como conservá-lo. A interseção entre a tecnologia e o património demonstra como o passado continua a viver no presente e a capacidade de reconstruir e conservar o património, algo pertinente no contexto contemporâneo dos conflitos mundiais. A capacidade de reproduzir digitalmente o património é novo e é algo que requer mais pesquisa. Principalmente, surgem as questões de autenticidade e de se uma cópia pode (ou deve) substituir a estrutura original ou não. Isso ocorre devido às várias implicações que envolvem a propriedade e o acesso (ou seja, se as reproduções 3D estão a democratizar a arte e o património ou não), efeitos de removê-la dos seus contextos geográficos e culturais e as complexidades da representação cultural na forma digital. Para investigar este tema emergente, estou a analisar as implicações teóricas e práticas de reproduzir digitalmente o património cultural pós-conflito. O apagamento da história é posto em causa com a recriação do património destruído pela guerra, bem como o processo de tomada de decisão sobre a escolha dos artefatos para a reprodução. Consequentemente, as minhas principais perguntas de pesquisa explorarão o que significa quando o “original” for destruído e uma “cópia” for criada em seu lugar, o que acontece quando as reproduções digitais se tornam virais e/ou viajam fisicamente pelo mundo; a quem pertence a herança digital reproduzida e qual é a sua contribuição às discussões sobre a representação. Portanto, estou a abordar tanto a importância do património cultural na sociedade contemporânea quanto o seu papel representacional. Para isso, estou a basear-me em conceitos teóricos das disciplinas dos Estudos Culturais, os Estudos de Património, a Museologia e a Antropologia a fim de analisar as complexidades das representações políticas, culturais e históricas. Utilizando os estudos de casos empíricos de três locais de pós-conflito, o Arco Monumental de Palmira (Síria), os Budas de Bamiã (Afeganistão) e o Leão de Mossul (Iraque), abordo as suas reproduções digitais na consideração da representação cultural e o papel do património respectivamente. Por fim, estou a usar estes três estudos de caso para tentar versar os problemas e vantagens envolvidos na recreação do património depois que o original foi destruído durante o conflito.

Palavras-chave: Património; Colonialismo; Reproduções 3D; Representação cultural; Autenticidade

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LIST OF ABBREVIATIONS

ASOR – American School of Oriental Research

CHI – cultural heritage initiative

DGAM - Directorate General of Antiquities and Museums

EO – earth observation

GIS – Geographical information system

HMRC – Her Majesty’s Revenue and Customs Department

HR – high resolution

ICOMOS – international council on monuments and sites

IDA- Institute of Digital Archaeology

IS – Islamic State

ISIL – Islamic state of Iraq and Levant

IWM – Imperial War Museum

MID – Million Image Database

SMT – Socially Mediated Terrorism

VHR – very high resolution

VR – virtual reality

Part I

INTRODUCTION

This dissertation aims to bridge the gap between theory and practice in terms of the recreation of heritage. By considering the multifaceted implications and effects of recreating heritage lost in war using hyper-real reproductions (facsimiles), it is possible to move beyond the notion of technological advancements to the ethics of reproduction. Using the examples of the Bamiyan Buddhas (Afghanistan), The Lion of Mosul (Iraq) and the Palmyra Triumphal Arch (Syria), a discussion is formed regarding the different aspects to technologically facilitated reproductions in place of the original. Dimensions such as the medium of reproduction, the resituating of heritage and the repercussions for cultural representation are all considered when discussing the ethics of heritage reproduction. Because the intersection of heritage and digital reproductions is many fold and complex, it incorporates new questions of the concept of ownership, authenticity and representation.

I will be critically analysing the benefits and the concerns of reproducing heritage from areas of conflict in the instances where the original structures have been severally damaged or demolished. This will be done through the field of culture studies, using the research tools it has to offer and accompanied by the versatile range of fields of archaeology, anthropology and museology. The interdisciplinary approach will aid me to develop the ideas of the role of heritage in society today and the toll of the current conflicts in the Middle East specifically. My study will be focusing on my interests of their recreation post conflict, primarily through emerging digital technologies, notably 3D printing and holograms. The relevance of the significance of being able to reproduce a 1:1 copy of heritage destroyed in the processes of conflict today is partly what attracted me to the topic. Innovative technologies are constantly being created within the fields of archaeology to advance the study of lost and damaged heritage through reproduction, making it a fast-paced and evolving topic. The social impact of both the destruction and the reproduction of heritage sites is something which I shall be considering in light of representation. Consequently, my main research questions will be considering what it means when the 'original' is destroyed and a 'copy' is created in its place; what happens when digital reproductions become viral and/or physically travel the globe; who 'owns' the heritage and what does it contribute to representation?

In order to address these research questions regarding the complexity of heritage reproduction I use the two main case studies of the Bamiyan Buddha (Afghanistan), The Lion of Mosul (Iraq), and the Triumphal Arch of Palmyra (Syria) to layout the key discussions of reproduction, authenticity, and representation. This is contextualised by the theoretical work of Walter Benjamin's theory of *aura* and Jean Baudrillard's *Simulacra*. The dissertation is divided into two parts. Part I outlines the theoretical aspects of heritage and representation and is followed by Part II, which draws on the material outlined in Part I to analyse the case studies and the effects of 3D reproductions of heritage. In Chapter 1 I start by providing a contextual backdrop of heritage in all of its forms, paying particular attention to its destruction and reconstruction. Each section of the chapter develops the definition and importance of heritage, notably focusing on the cultural significance of heritage, the use of archaeological methodologies to understand heritage, the implications of heritage within conflict zones, and the concepts of the life cycle of heritage. By drawing on theories of power, place and social memory, primarily those of Stuart Hall and Pierre Nora (*lieux de memoire*), I highlight the importance of the study of cultural heritage and its socio-cultural function. I continue in Chapter 2 by delving into theories of representation, closely analysing digital reproductions and iconoclasm within 3 sections. By firstly considering theories of representation and heritage in Section 1, I move on to Sections 2 and 3 to further develop key concepts of reproductions and iconoclasm. Using Walter Benjamin's theory of *aura* I question to what extent 1:1 reproductions can be considered as authentic, before moving onto the implications of digital reproduction. I use Barthes' theory of semiotics and Said's *Othering* to consider the interrelation of heritage and representation, especially when they are recreated within a new setting. Having set the scene, I introduce my three case studies and their cultural/ historical contexts in Chapter 3: the Bamiyan Buddhas and the Lion of Mosul, respectively. Starting from Benjamin's discussions on *aura*, I consider the democratisation of art and heritage in relation to the western Bamiyan Buddha and the Lion of Mosul in Sections 1 and 2. Here I highlight the intrinsically political nature of heritage before critically analysing the relevance of *aura* in today's globalised and digital world in Section 3. Lastly, I turn to the destruction and reconstruction of the Triumphant Arch of Palmyra in Chapter 4, concentrating on ideas of representation in the face of decontextualization, on the back of Baudrillard's *simulacra*. I further consider the disparity between 3D reproduction as an educational tool for society in general, and pure ownership

reminiscent of colonial power systems in Section 1. Having investigated the power of heritage and the implications of its reproduction after its intentional destruction in Section 2, I conclude that individual contexts of the sites are paramount. As a result, I believe that the Triumphal Arch's reproduction can be considered rife with colonial sentiments of power through material possession of the Other. On the other hand, the reproductions of the Bamiyan Buddha and the Lion of Mosul can be considered closer to a sympathetic cultural and historical representation, I believe partly due to their settings (in a museum and in situ). Therefore, while I believe that there are still many contentions for heritage reproductions post destruction, there are benefits that should be taken advantage of, however only if done ethically.

CHAPTER 1

FROM THE TANGIBLE TO INTANGIBLE: AN UNDERSTANDING OF HERITAGE TYPES

1.1 Heritage: The politics of Memory

Within this dissertation, I will acknowledge the wide breadth of the term heritage and the cultural differences that inform its various definitions and understandings. As expressed by Crane, heritage is socially and culturally important by rendering the past as timelessness and visible (2006: 102). Due to the case studies used within the work, ‘heritage’ will be understood under the umbrella of material heritage to exemplify the role of heritage in relation to representation and 3-dimensional digital reproductions. Digital heritage falls within the category of immaterial heritage, defined by UNESCO on their webpage as: “practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith *UNESCO*, n.d.) that are shared within communities and transferred down generations, such as the British medieval Morris Dance¹. This differs from material heritage, which as the term suggests is tangible and three dimensional, whether a structure or artefact. Within heritage studies and museum studies, there are concerns regarding the preservation of intangible heritage (Viken, 2017). This is something that has been felt by Norwegian immaterial heritage as the country’s traditional music and dance faces archiving problems due to intellectual property laws (Viken, 2017: 1).

In connection with the cultural importance of heritage, I will also unpack its political uses by drawing on the concept of the colonial museum and the role of heritage as a tool of power and legitimisation. There are many definitions and understandings of what heritage is with many studies from the fields of culture studies, anthropology, and sociology investigating its social and cultural meanings. Within the West (primarily Europe and the United States of America), the notion of heritage has recently expanded beyond its semantic roots to incorporate concepts of cultural property and historic monuments (Vecco, 2010: 321). By returning to the etymology of the word heritage it is possible to gain a deeper understanding

¹ For further information about the tradition, please see <https://themorrisring.org/publications/morris-tradition> [Last accessed April 23, 2023].

of heritage through its semantics and thus its wider concepts. Heritage can be traced back to its Latin roots as the term *patrimonium*, denoting the personal inheritance of property and goods within the family (Funari, 2001: 93). The term can further be understood on a national level of state acquisition and successive public ownership of national property, such as through the state intuitions of the museum (Vecco, 2010: 322). Only later in the 20th century did the term heritage expand beyond its semantics of *patrimonium* to incorporate cultural objects into its repertoire, including immaterial culture (Vecco, 2010: 322). Therefore, it soon becomes clear that heritage is closely linked with both memory (personal and/or national) and ownership, as it is “Imbued with a message from the past, the historic monuments of generations of people, remain to the present day as living witnesses of their age-old traditions” (ICOMOS, 1964). Therefore, it can be said that the understanding and study of heritage has evolved from an objective legal position of inheritance to a subjective stance incorporating belonging, nationalism, historical narratives and intangible values. Moreover, it should be noted that heritage is to a certain extent culturally and socially defined and constructed; many cultures do not limit heritage to the material, to include dance, music and other artistic practices (Vecco, 2010: 324). From the field of cultural heritage and archaeology, this has been reiterated within the work of Laurajane Smith: “heritage not so much as a ‘thing’, but as a cultural and social process, which engages with acts of remembering that work to create ways to understand and engage with the present” (2006: 2), drawing attention to the socially constructed dimensions of heritage. Consequently, a consideration of other cultural practices and beliefs is crucial when considering the concepts and values of heritage in order to keep a holistic understanding of its multifaceted definitions. Other than the semantic and cultural acknowledgement of heritage, there can be understood to be an institutional one. Most prominent is the work of UNESCO (United Nations Educational, Scientific and Cultural Organization), established in the context of the Second World War in 1945 to protect global cultural heritage and foster peace UNESCO, n.d.). Accordingly, there are sets of definitions which, according to the organisation, defines heritage and a criterion, according to which heritage is categorised. As of February 10, 2023, UNESCO’s webpage provide three main categories of heritage: 1) Cultural heritage (including tangible and intangible heritage, movable and immovable heritage), 2) Natural heritage defined as “Natural sites with cultural aspects such as cultural landscapes, physical, biological or geological formations” UNESCO, n.d.) and 3) Heritage in armed conflict.

The traditional semantic understanding of heritage becomes blurred however when one considers that UNESCO has granted the replacement of destroyed structures as World Heritage Sites, in place of the original. Two famous examples are the Old Bridge of Mostar (Bosnia-Herzegovina), which was destroyed during the which was destroyed during the Croat–Bosniak War (1992-1994) and the Old Town of Warsaw (Poland), razed in WWII (1939-1945) (Doppelhofer, 2016: 4), raising debates surrounding heritage and authenticity. Under the credence of UNESCO, the copies of these two sites have replaced the original structures and are listed under the UNESCO World Heritage Sites.

However, it should be acknowledged that there are many oppositions to institutions such as UNESCO and their authority to prescribe and omit what a heritage site is. An obvious opposition would be the criteria by which they define a World Heritage Site, considering the varying definitions of heritage cross-culturally. This is emphasised by Layton and Thomas in relation to UNESCO's assumption of the universality of cultural heritage by overlooking the fact that "Not all societies use the remains of the past as a means of substantiating their identities, or securing their claims to territory" (Layton and Thomas, 2001: 1). Another contention with UNESCO is the criteria of the term 'outstanding universal value' set in 1972 as picked up by those such as Cleere (2001). This denotes certain sites as exceptional for the universal heritage of mankind, making it of outstanding cultural value. However, Cleere draws attention to the paradoxical nature of the idea, arguing that "there appears to be an implicit assumption that there are values that transcend regional and chronological distinctions" (Cleere, 2001: 24) in relation to their definitions of monuments, groups of buildings, and sites; the very nature of humankind is its diversity, not a shared linear historical narrative reflected through select monuments. This highlights the deeply Western orientation of UNESCO's understanding and definition of heritage, which in turn emphasises a tension between cultural and institutional level definitions. Such a Eurocentric and a Western anchored reading of heritage throws up the question of the role of colonialism in heritage, especially when considered in terms of museums. In the post-colonial museum, the cultural object (heritage) has been reinstated as the primary signifier of cultural, national, and ethnographic identity (Coombes, 1994: 217). The main focus is on the hybridity of cultures rather than perhaps the understanding of their unique contexts and conditions.

Having (briefly) explored the complexities of the term ‘heritage’ and its many meanings it becomes evident that heritage is diverse. What remains clear, however, is the cultural importance of heritage as a testament to the past and its role in belonging, whether national, cultural, or ethnic. Heritage is understood by many to be closely tied with culture and identity; heritage sites such as monuments have been understood as locations of ‘*collective memory*’, a concept which arose as part of the 1980’s anti-history of post-modernity, whereby there is no one shared history (Rowlands and Tilley, 2006: 502). The past is instead widely studied and understood as multi-narrative while traditional History is contested as a singular linear truth (a grand-narrative). As expressed by Foucault in *The Archaeology of Knowledge*, history is made of ruptures and conflicts rather than the traditionally formulated linear one, narrated by a select few (1969). One of the significances of this is what Benedict Anderson terms ‘imaged communities’ with the exploration of heritage and the shared image of a nation. The theory of ‘imagined communities’ denotes that the definition of a nation is informed by its heritage, as well as its geographical borders (Anderson, 2006: 225). As earlier elaborated by Stuart Hall: “We come to know its [nation] meaning partly *through* the objects and artefacts which have been made to stand for and symbolise its essential values. Its meaning is constructed *within*, not above or outside representation” (1999: 5). This highlights the importance of cultural heritage in establishing identity built upon the past. In light of this, targeted attacks against heritage sites represent wider (political and ideological) statements and are destructive for the construction of identity through the past. In fact, the intentional destruction of cultural heritage is considered to be a war crime due to the consequences it has on identity and cultural capital (Doppelhofer, 2016: 1). Moreover, under Article 27 of the Universal Declaration of Human Rights, access to cultural heritage is considered to be a basic human right (Doppelhofer, 2016: 2). Cultural heritage monuments are widely believed to be integral for cultures through memory. The work by scholars such as the French historian Pierre Nora highlights the role and cultural importance of heritage through the idea of ‘*lieux de memoire*’ (sites of memory): “There are *lieux de memoire*, sites of memory, because there are no longer *milieux de memoire*, real environments of memory” (1989: 7), as heritage become important for groups’ remembrance of history. Moreover, further related to the theory of ‘collective memory’ is the work of Halbwachs (1992) who highlights the importance of heritage for the establishment and maintenance of national identity. The expression of ‘collective memory’ through heritage is not limited to material

artefacts and sites, but as expressed by Pierre Nora, may include events and shared experiences by asking “Are not every great historical work and the historical genre itself, every great event and the notion of event itself, in some sense by definition *lieux de memoire*?” (1989: 21). Therefore, heritage has an important symbolic value within society by contributing to the creation of communities and histories, becoming sites of belonging and pride.

The epitome of the cultural importance of heritage is found at the national level of the museum, a site where the history of a nation is displayed and observed. It is within the museum that the treasures of the nation are displayed, creating a snapshot into the past to inform the audience of the identity upon which one is built. However, it may, of course, be said that the museum is biased by its very nature having gone through a process of careful selection to tailor (curate) a historical and cultural narrative. Logically by assuming that through the identification with a history and a narrative via heritage a sense of belonging is created, by the same logic, it can be excluding. The construction of history and belonging through heritage has been criticised as being exclusionary as power structures are at play: “the control of a society’s memory largely conditions the hierarchy of power” (Connerton, 1989: 1). The ‘collective memory’ fostered through heritage — such as represented in the museum — therefore has political dimensions that should be addressed.

Therefore, another crucial aspect to mention is that of the politics of heritage, namely its role in the formation of the nation-state and the legitimacy of geographical occupation. Heritage may be understood as being hand-in-hand with state power and national politics, a symbol of land ownership through cultural inheritance. The cultural institution of the museum can be understood as a central force, whereby traditionally they showcase the power and wealth of a nation through both its own heritage and artefacts acquired overseas. This is especially notable within the context of Colonial development and expansion with the patronising of cultures within the museum context, such as the formation of institutions like the Pitt Rivers ethnographic museum (founded in 1884, Oxford) and the British Museum (founded in 1753, London) in Great Britain across the 18th and 19th centuries. Thusly, the early museum has been understood as the recognition that the cultural object has been reinstated as the primary signifier of cultural, national and ethnographic identity (Coombes, 1994: 217). Importantly for the topic of this dissertation, is the fact that it is very often (if not always) western and European museum collections displaying works from colonial and repressed countries and

cultures. Recent examples include 1) the 2019 Venice Biennale art display of ‘Barca Nostra’ (Our Boat), a migrant boat wreckage on which over 700 people died in 2015 while crossing from Libya to Italy (BBC, April 19th, 2015); and 2) the reopening of the Italian Colonialism Museum (Museo Coloniale) in 2020, which has a dark history with Eritrean cultural objects. Besides the discussions and issues surrounding the display of the colonised for an audience, the museum also put people on display, e.g. their 1906 exposition ‘The Esposizione di Milano that displayed families performing everyday tasks, dressed in their native clothing, to form an “Eritrean village”—quite literally objectifying them. This raises challenges for both institutions and curators who must work to de-colonialise such spaces. The aim of decolonial theory within the museum space is to restore histories and perspectives that have been made subordinative over history (Muñiz-Reed, 2017). Importantly, this is because “The museum cannot be seen as a neutral institution; it is an expression of the modern/colonial power. It holds epistemic and aesthetic power” (Vázquez Melken, 2019: 1), something that must be consciously tackled — as expressed the curator and professor dedicated to decolonising aesthetics, Rolando Vázquez Melken.

The role of heritage in politics can be noted as “governing elites in many societies vigorously create heritage displays to maintain social stability, existing power relations, and institutional continuity” (Hoelscher, 2006: 207). Moreover, it has been noted that cultural institutions are founded and built within periods of turmoil and crisis, such as the Louvre Museum (Paris) which was founded as a colonialist museum to hold the trophies of Napoleon (Rowlands and Tilley, 2006; Hoelscher, 2006). This directly emphasises the role of heritage and the museum in the politics of colonialism and the power of cultural exhibition. For instance, as discussed by John Urry, the “‘heritage’ that mostly gets remembered is that of the elite or ruling classes. It is their homes and estates that have been ‘saved for the nation’ by the [British] National Trust and other preservation organizations” (1996: 57). Therefore, heritage has a political aspect, one which should not be ignored. Consequently, as argued by the Cultural Studies scholar, Stuart Hall, the nation is essentialised through the process of a selective heritage, principally a “distilled essence in the various arts and artefacts of the nation for which the Heritage provides the archive. In fact, what the nation ‘means’ is an on-going project, under constant reconstruction” (Hall, 1999: 5), simultaneously highlighting the manipulation and multiplicity of heritage in

relation to a historical narrative. Therefore, as further remarked by Stuart Hall, a multicultural view of heritage and ownership is important when considering heritage (1999). While heritage has cultural value, Hall questions the role of heritage, its meaning and its cultural sharing. By politicising heritage Hall draws on the history and politics of heritage artefacts whilst simultaneously questioning the notion of heritage ownership today; drawing on the foundation of English museums as a ‘cabinet of curiosities’ composed of ‘exotic’ artefacts from far off colonies Hall highlights the construction a national narrative built of dominance and power (1999: 5). Hall further reiterates the context of the political narrative of heritage by addressing the point that heritage and artefacts convey cultures, histories and meanings of nations within the museum, devoid of its wider context. Therefore, it is through the lens of the museum and heritage that we reach an understanding of culture, a heritage which “reflects the governing assumptions of its time and context” as argues Hall, heritage is always political and inflects the power of the dominant historical narratives of the coloniser (1999: 6). Subsequently, from a post-colonial perspective, heritage can be utilised to propagate and maintain national historical narratives devoid of multicultural voices and histories, raising the question of ownership. Hall raises the important questions of “who should have the power to represent?” and “who has the power to represent the cultures of others?” (Hall, 1999: 8). These questions play into the history of cultural representation within the museum, which is connected with the Western empires and nations displaying oppressed groups. The problem is that, historically, the ethnological and cultural museums raise ethical questions of representation as they can be understood as using the suffering of oppressed and marginalised (colonialised) groups to display their own superiority and triumph. There is a certain level of accountability held by Western museums and galleries to decolonialise the narrative by “presenting work that include the disregarded memories of marginalised communities”² (BBC, as is achieved by exhibitions such as ‘Re(as)sisting Narratives’ that aims to reframes slavery).

However, the very process of a selection of heritage upon which an identity is constructed (whether on a national level, a group’s or individual) is by its very nature selective and discriminatory, with many histories forgotten or merely neglected as inferior. One of the many examples would be the contentions surrounding the ownership of the site of Ayodhya (India), currently a Mosque under which archaeological excavations reveal the foundations

² Frank, Chandra “Towards a decolonial curatorial practice”, *Framer Framed*, September 12, 2016.

of what is largely believed to be marking the place of the Hindu deity Rama's birth (Laal, 2001; Sharma, 2001). The dispute of ownership over the site between the Hindu and the Muslim Sunni communities was recently taken to the law with the Indian Supreme Court declaring in November 2019 for the construction of a Hindu temple on the land and for the rebuilding of the Sunni Mosque on another piece of land Biswas, November 9, 2019). This highlights the importance of cultural heritage in relation to belonging and ownership, as it can all easily be contested with older evidence of occupation.

1.2 Remote Heritage Analysis: Archaeology and Technology

The fusion of heritage and technology has led to many important innovations over the centuries, not least in protection, surveying and recreation. As expressed by Newall et al., the advent of digital analysis is “changing the ways.... we uncover, connect with, interpret and represent the past” (2012: 287) as it opens new possibilities for the study of heritage. The intersection between archaeology and the digital sphere offers many benefits and possibilities beyond preservation and restoration to the sharing and movement of heritage and cultural artefacts, in particular from regions of war and conflict. Through technologies such as 3D printing, 3D 360-degree scans, and virtual reality (VR) 3D modelling, endangered and lost cultural artefacts can be accessed. It is now possible to remotely access heritage through interactive 3D digital simulation, whether within the context of the museum or by research groups. Not only are these technologies advantageous for the democratisation of heritage, but also for mapping and recreating activities and patterns through GIS software which allows for a new perspective into the lives of the past. However, there are some ethical questions of ownership that arise when digital renditions are copyrighted and owned by companies, such as *Google Arts and Culture* as opposed to their original nations and cultural homelands. In fact, ownership and reproductions of cultural artefacts imply a new kind of colonialism, a “digital colonialism”, as termed by the historian Schroeder. This term is a response based on the fear that 3D copies will be held under the legal ownership of copyright by museums and institutes, especially after the destruction of the original. Whether they are held in digital platforms, such as *Google Arts and Culture* or are reproduced as 3D structures, there is the great risk of falling into the same traps of the colonial museums of the previous centuries. Such ownership of another county's heritage is not so dissimilar from the colonial trophies of the 19th and 20th centuries as artefacts are removed from their complex context

into the museum as a public display, owned and housed by an institution. The technology becomes tinged with colonialism due to an imbalance of power between the Western (developed) world and the developing countries, who may not have the funding or means to own their own digital heritage in the coming years due to copyright and legal costs, unlike the global companies of Google.

By looking back over the last few centuries, we can see that new technological developments progressively shifted our approach to heritage and its protection. For instance, satellite imagery has long been a useful tool for archaeological surveying, allowing for a new perspective on site activity. This reveals patterns which may otherwise have been indiscernible (Ur, 2013: 28). Developing from the context of the dissolution of the Ottoman Empire, WWI and the following mandate period, aerial images are useful for the identification of crop and soil marks that are only visible from a distance and can indicate (ancient) human activities (Ur, 2013: 28; Lasaponara and Masini, 2011: 1995). The turning point of satellite imagery within aerial surveillance has had a huge impact on archaeological site analysis, developing from intelligence satellite images. The declassification of U.S Cold War intelligence satellite images in 1995 covering the Middle East (code-named CORONA) and the Soviet satellite image archives changed the way archaeologists approached and understood human activity from heritage sites. As explained by Ur, aspects such as town planning, the connection and networks between sites and the wider landscape came to the fore, as well as the identification of features previously undetected such as canal and road systems (Ur, 2013: 28). Not surprisingly therefore over the last two decades earth observation (EO) techniques have become increasingly popular within archaeology (Lasaponara and Masini, 2011: 1995). According to Lasaponara and Masini, there are three main reasons for the increased usage and popularity of remote image observation for the assessment of heritage, the first being the technological advantage and improvements of the spectral and spatial resolution of the satellites; secondly that the technology and data archives are becoming increasingly user friendly and available, opening it up to a wider and less specialised audience; and thirdly a shift within the field of archaeological research towards the human relation to the wider landscape and environmental changes, both of which are viable for study through EO techniques. The advancements from the early pioneers of aerial photography are astounding. With the growing number of high resolution (HR) and very high resolution (VHR) satellites it is now possible to detect what is invisible to the

human eye on the ground such as the discovery of the ancient water system under the Cambodian forest at Angkor, detected using radar from the NASA Space Shuttle (Moore et al., 2007). In recent years there has been much work on the remote surveying of heritage sites within areas that are inaccessible due to the on-the-ground conditions. These studies have been focused primarily to the study of heritage within conflict zones in the regions of Syria, Northern Iraq, Afghanistan, and Libya with the aim to assess the status of heritage and to confirm on-ground sources. Research organisations such as the Directorate General of Antiquities and Museums (DGAM), the Cultural Historical Initiative (CHI), and CyArk have lately documented and recorded damage to endangered heritage sites impacted by environmental, climatic, urban and conflict factors. Key studies by the international research group CHI in connection with the American School of Oriental Research (ASOR) highlights the vulnerability of heritage. Many of these studies use a methodology of supplementing the satellite images with earlier records, such as those from CORONA, for the purpose of comparative studies to monitor the effect of recent activities within the region³. Despite the contribution these studies brought to the field of research, it has to be acknowledged that they are all Western based projects and organisations, while many of the sites analysed are not. This is not something new but perhaps reflects historical dynamics of power, rooted in the concept of the Other, as the very birth of archaeology and land surveying started with Western parties “discovering” the East and its historical past (Porter, 2010).

1.3 Heritage in Conflict: Theories and Practices

In light of what is being discussed and the theoretical discourse developed within this chapter, it is important to consider the implications of the destruction of heritage artefacts and sites. The level and types of damage varies, from direct artillery hits to secondary damage associated with conflict such as looting. Moreover, within the context of the last few decades, cultural heritage has suffered greatly from targeted attacks (iconoclasm). This is especially prominent within areas where conflict is rife with the deliberate or collateral damage of heritage sites in regions such as Syria, Afghanistan and Iraq. Of course, heritage sites outside of these regions are also experiencing processes of attrition and destruction,

³ Such reports and analyses include the works by Casana and Langier (2007); Hammer et al., (2017); Cunliffe, Emma (2012); Danti et al., (2017).

however due to the location and context of the case studies from these regions, a focus is given to these three geographies in particular.

Conflict may be broadly understood within the UNESCO glossary definition as:

“International armed conflicts and non-international armed conflicts that have as a minimum two characteristics: (1) organized armed groups, (2) engaged in intense armed fighting. An armed conflict exists whenever there is a resort to armed force between States or protracted armed violence between governmental authorities and organized armed groups or between such groups within a State”⁴

Several protective measures have been put in place for heritage, most markedly the consideration of intentional destruction of cultural heritage as a war crime, with the first sentence in 2016 (under Article 8(2) e (iv) of the Roman Statute and the 1954 Hague Convention) for the destruction of the mausoleums in Timbuktu (Doppelhofer, 2016: 2). Despite the laws initiated for heritage protection, it is a complex issue to tackle, one which does not appear to be solvable through the establishment of laws alone. As indicated by O’Keefe (2006),

The gravest threat to cultural property in armed conflict today is its theft by private, civilian actors not bound in this regard by the laws of war. The breakdown of order that accompanies armed conflict and the corrupting lure of the worldwide illicit market in art and antiquities continue to drive the looting of archaeological sites and museums in war-zones and occupied territory (O’Keefe, 2006: 2).

Importantly, therefore, it appears that direct impact on heritage from conflict — such as artillery and shelling activities and military occupation of sites — should not be considered the central force when discussing the destruction and damage of heritage within conflict. There are numerous examples of the plundering of cultural heritage alongside the armed conflicts, several of which are situated within the Middle East due to the extensive wars and conflicts within the region over the last decades. Afghanistan, for example, has a long history of conflict and war, which has in recent years devastated the country and its national heritage (Hammer et al, 2017: 2). Many exceptional cultural heritage sites and artefacts have been

⁴ “UNESCO Database of National Cultural Heritage Laws”, UNESCO, 2005: 1-2
http://www.unesco.org/culture/en/natlaws/db/database_glossary_e_2009.pdf (Last accessed May 21, 2023).

destroyed and severely damaged in the process, notably the Bamiyan Buddhas which I analyse in further detail as a case study. Other examples of Afghanistan's heritage destruction includes the National Museum (Kabul) during the civil war period (1989-2001), founded in 1931, as "...one of the world's most opulent depositories of ancient art..." (Dupree, 2002: 983). Sadly 75% of the cultural heritage artefacts within the museum's collection were looted or simply stolen as clandestine looting activities rose within the country alongside political disintegration (Feroozi et al., 2004: 1).

Alongside Afghanistan, it is also paramount to consider the devastating effects of conflict on heritage within the context of Syria, which has been at the forefront of media coverage. The advent of the war within Syria saw a sharp decline of its rich cultural heritage that suffered not only from targeted attacks by IS (Islamic State) but also indirectly through military activities and clandestine looting. Remote archaeological surveys carried out within Syria reveal patterns and the extent of destruction caused by the war, as well as the impact on heritage sites. Starting in 2011, there have been intensive attacks against ethnic and religious groups by the terrorist group IS within Syria, which by extension have resulted in the loss of cultural heritage⁵. Much work has been done by the Syrian State's cultural organisation Directorate-General of Antiquities and Museums (DGAM) for managing and preserving its heritage by recording and maintaining the sites; not only are they assessing the heritage, but they have protected and safeguarded it. As a result, many DGAM staff have sacrificed their lives due to their associations with heritage and its safeguarding, including the head archaeologist of Palmyra and acclaimed Syrian academic, Khaled al-Asaad, who lost his life in 2015 for the protection of Palmyra's irreplaceable artefacts (Cunliffe, 2014: 241).

However, beyond the direct threat of conflict to the protection of cultural heritage, numerous associated risks arise. A significant danger for heritage located within warzones is the threat of looting and its subsequent appearance on the black market (Atwan, 2015; Cunliffe, 2014; Fredricks, 2018; Hartnell and Wahab, 2015). Studies have indicated that the UK and US are highly involved with the illicit antiquities market (MacKenzie 2005: 252), as the "vast majority of the thousands of artefacts confiscated every year at Heathrow, the world's busiest

⁵ As of 2012 already many of the UNESCO and national heritage sites of Syria were affected including sections of Archaeological Villages of Northern Syria (in particular al-Bara, Deir Sunbel and Aïn Larose), Borsa, Crac des Chevaliers, and the cities of Damascus and Aleppo (Cunliffe, 2012). Later the UNESCO Site of Palmyra was critically damaged between 2015-2017, as well as the ancient cities of Damascus and Aleppo (Danti et al., 2017: 12).

airport, come from Afghanistan, according to Her Majesty's Revenue and Customs Department (HMRC)" (Peters, 2009). The scale is massive, with the confiscation of Afghan antiquities alone reported at circa 15,000 from Heathrow airport in 2009 alone (Stein, 2015: 188). Within the context of the destabilisation caused by war, cultural heritage is exploited by many for cash on the black market, notably by IS: "Revenue from looting and trafficking Iraq and Syria's artefacts is reportedly second only to oil smuggling"⁶. Heritage can therefore be understood as a currency and a means to raise money for arms, which is highlighted by Vaughen who notes how "World heritage is stored credit and the gold standard is the UNESCO inscribed list" (2016, 537). Consequently a new face and role of heritage is seen within conflict zones and suggests that within Syria IS' destruction of heritage was strategic to a degree. As highlighted by Atwan "Looting antiquities fits well with [IS's] belief that it has to 'cleanse' 'pagan' relics such as shrines and tombs. But it destroys them only after having removed everything of value from them; these are then considered spoils of war and a legitimate asset" (2015: 147). Therefore, within the context of war heritage becomes a means of financing conflict, facilitated by the global webs of the black heritage market. You simply have to turn on the news to see how heritage can become political threats as we heard in 2020 that Donald Trump considered to strike Iran's cultural heritage sites "very fast and very hard" amid tensions between Iran and the U.S.A⁷.

Having taken into account the destruction of heritage within conflict and its significance, it is important to consider the topic of the destruction of heritage and the more theoretical discussions surrounding what their destruction means, ranging from theories of what makes an original 'original', what happens when the original is no longer present, and the dichotomy between the original and reproductions. In light of the destruction and loss of material cultural heritage within areas of war and conflict, the dichotomy of the original and the copy is paramount. However, within heritage studies, the notion of 'original' and 'copy' has become contentious. This can be understood with examples of copies of heritage sites becoming officially recognised by UNESCO as World Heritage Sites, such as the Old Bridge

⁶ Hartnell, Tobin and Wahab, Bilal "Stop ISIS and save Iraq's cultural heritage", *Rudaw*, April 23, 2015 <https://www.rudaw.net/english/opinion/23042015> (Last accessed January 2023).

⁷ Beltrán-García, Sergio "Trump's threat to destroy Iranian heritage would be a war crime", *The Guardian*, January 6, 2020 <https://www.theguardian.com/artanddesign/2020/jan/06/trump-threat-destruction-iran-heritage-war-crime> (Last accessed January, 2023).

of Mostar (Bosnia and Herzegovina), destroyed in the Croat-Bosniak War of 1992-1995, and the Old Town of Warsaw (Poland) that was extensively bombed during WWII (1939-1945) (Doppelhofer, 2016: 6). Significantly in both cases, they were reproduced post destruction and were given the status of an 'original' by being inscribed as a World Heritage Site and institutionally recognised as the original form. Consequently, the removal of the priority given to the materiality of the original has changed the debate surrounding authenticity and heritage. This is a timeless debate. Think of the ancient Greek philosophical work of Theseus' Paradox, a pertinent summary of the issue in question; here the idea of the original and the copy is challenged by the analogue of the slow decay of a ship and the piecemeal replacement of the ship's planks, until eventually all of the ship's original planks no longer remain. Ultimately this raises the question whether it is the same ship, i.e., whether the originality of the object is intrinsic to the original materials. In juxtaposition, Plato's conception of '*Idea*' illustrates that the representation of the object is more important than the factuality of it. Therefore, the materiality of the artefact is not fundamental to its originality which is overruled by its symbolic power of what it represents as "It is no longer a question of imitation, nor duplication, nor even parody. It is a question of substituting the signs of the real for the real" (Baudrillard, 1995: 2).

In connection to the discussions surrounding the notion of originality are those confronting the role of the reproduced replacement. The work of Baudrillard on the relation between reality and the symbol (reproduction) and society is explored through the concept of '*simulacra*' whereby the complex cultural processes of the replacement of an object (reality) can fully replace it without the loss of meaning (e.g. the recreation of Mostar Bridge, Bosnia and Herzegovina). Such discussions are useful to apply to the notion of heritage as the life history of a building, or more complexly of an entire archaeological site (defined geographically by its features of a building, structures and evidence of human activities), experiences constant repair and replacement leading to their 'originality' being put to question — a topic which is explored more in-depth in the following subchapter.

Having discussed the impact of war on heritage, specifically within Afghanistan and Syria, it is of interest to consider the scope of its effect. Whilst conflict has devastating consequences for cultural heritage sites, other dimensions shouldn't be ignored or belittled; the attrition of heritage should be viewed holistically within a wider framework beyond

conflict in order to substantially consider its impact. For instance, the effect of urban expansion, invasive agricultural activities and illegal excavation activities (looting) are hugely impacting the presence of heritage (Danti et al., 2017: 9). Moreover, many of the sites documented within Syria during and post conflict were endangered leading up to their targeted destruction due to natural taphonomic processes and activities mentioned directly above (Cunliffe, 2014: 230).

1.4 The Cultural Construction of Destruction

In light of the concepts discussed within the chapter, it is important to delve into the notion of (heritage) ‘destruction’ and ‘restoration’, by considering the point that the destruction of heritage is culturally informed; the damage and destruction of heritage does not necessarily equate with the need for restorative processes. Restoration within the context of heritage studies can be defined as “returning a place to a known earlier state by removing accretions or by reassembling existing elements without the introduction of new material” as defined by Article 1.7 of The Burra Charter (2013). However, there are contentions with restorative practices in light of it damaging the eclectic history of the artefact or site by removing its documentary information to create a ‘curated’ view of history (Wijesuriya, 2001: 256). Wijesuriya argues that restoring buildings and sites back to their ‘original’ form is a destructive act which removes the eclectic nature of the object in question to its form at a single point in time, therefore erasing its complex context of cultural narratives and transformations, even if they are destructive to the overall form (2001). Therefore, damage experienced by heritage sites, whether intentional or not, may not always be viewed as detrimental to the meaning and symbolism of the heritage artefact or monument. As asked by Polloch “Must monuments, places and objects be frozen in on (arbitrarily chosen) state in order to be preserved?” (2016: 226) as we seem to view ruins as cultural sites. Polloch expands by providing the example of the Parthenon in Rome which is preserved as a cultural heritage site within its current form, which has been damaged throughout its history, leaving us with an incomplete form (ibid, 225). This highlights the arbitrary nature of what we consider the ‘complete’ form of heritage, throwing into question the notion of destruction as a negative attribute of heritage and restoration processes as both positive and necessary to make heritage ‘complete’. This is something which is further articulated by Bernbeck with

the idea that heritage is not a stable and fixed concept, but rather a form which changes and transforms throughout its personal life history:

Indeed, if heritage does not carry in itself the potential for a lack of change, it cannot be heritage. Heritage is an inhuman and ‘unnatural’ concept, since it pretends that change, after all the main characteristic of humanity and of life itself, can be frozen through processes of conservation and preservation (2013: 527)

The complexity of the dichotomy between destruction and restoration highlighted here can be understood as being tied to cultural constructs, connected in part with the understanding of the expression and experience of time. A pertinent example of varying cultural views of heritage and destruction is the heritage of the city of Hue (Vietnam) that experienced damage in the course of the Vietnam War (1955-1975) (Johnson, 2001). Johnson provides other ways of understanding the past and decay by breaking the dichotomy between destruction and restoration; the author explores several theoretical implications to the notion that destruction is an intrinsic part of the present past. Rather than restoring the cultural heritage of Hue, they bear the signs of destruction as the sites are not restored to their former structure – indicating the importance of destruction in the construction of the past and heritage. Moreover, Johnson reiterates that the creation of the past is itself destructive: certain objects are selected for preservation over others and are considered important representatives (2001: 76). Therefore, the construction of the past should not be considered universally, as the authenticity of heritage is not dependent on its form being complete and restored. Rather processes of decay and destruction may be considered as part of the authenticity of cultural heritage and the need to restore may further subjectify and destruct the site or artefact. As reiterated by Hoelscher, history becomes subjective and a selective linear process despite

The processual nature of heritage, a social process that is continually unfolding, changing, and transforming. Commemorative activities, especially those involving the establishment of historic museums or monuments, attempt to stabilize and clarify the past that remains elusive (2006: 206)

Cultural heritage can therefore be said to be part of a process which constrains time by directing it through a selection and prioritisation of restoration. Consequently, by asserting the main features and importance of heritage within society, a perspective is provided towards unpacking the implications of its destruction. It remains clear that the subject of

heritage and its preservation is pressing, and which requires attention from numerous fields of study to holistically understand the wide-reaching impact of heritage.

There is perhaps a controversial point to consider here, which has escalated over the past decades: how do we deal with the commodification of heritage and the past in light of the destruction of heritage? Processes connected to conflict and war are devastating heritage whilst there is increasing technological developments which allow for the (endless) recreation of destroyed artefacts. This is a new development which asks for further analysis to access the relation between heritage destruction and reproduction. The distinction between the binaries of copy vs. original and material vs. immaterial will be broached with a more detailed analysis in the following chapter.

CHAPTER 2:

CULTURAL AND HISTORICAL REPRESENTATION THROUGH HERITAGE

2.1 Theories of representation

Within this chapter an overview of the theories of representation will be introduced and its importance in the study of culture and heritage. Notably, it highlights the relations between cultural representation, the self and the dynamics of the formation of an understanding of the world around us. By highlighting the concept of the Other and relations of power in particular, the chapter provides an outline of how people recognise how others understand and shape the world around them. The concept of the Other will be considered primarily in terms of Edward Said's 1978 work *Orientalism* and his ground-breaking contributions to oriental studies by critically discussing the West's role in *othering* the East through oriental representations. Expanding on Said's work, I consider contributions made by Stuart Hall, Michel Foucault, and Linda Nochlin, among others, to discuss the plethora and complexities of Othering and the nature of representation. It is important to take into consideration the numerous forms and understandings of the term itself within Culture Studies and how they inform the theoretical frameworks and analysis. Therefore, within this context representation can be understood as the use of selected items as the face of a group/ culture. However, the selection of the object of representation isn't always defined by the represented, which I believe is a crucial bridging of representation and power, as the represented becomes othered.

When addressing the multiple theoretical principles of representation, it is important to highlight its relationship with power — something which is discernible throughout many discussions on representation. There are many understandings of power within the fields of cultural and social studies, including *hegemony* as formulated by Antonio Gramsci ([1929-1935] 1971) to Althusser's ideological based power of the State *apparatus* (1971). Power is something which underlies many of the discussions of culture studies, greatly shaping the discipline of Cultural Studies in the 20th century (Merli, 2010: 53). These studies are integral for providing essential tools for the discussion and analysis of varying forms of power. Such studies are pertinent more than ever within contemporary society as the power of the media,

politicians and people of influence are highly affecting how we understand the world around us and the narratives of other geographies. Consequently, the theory of *hegemony* posited by Gramsci is useful for considering class distinctions and the establishment of cultural norms by elite members holding influence over society, while Althusser's *apparatus* paradigm accentuates the role of the state. Based on ideological tenets individual beliefs, customs and values are formed through state *apparatuses* from the media to religion that are arguably undetachable. Furthermore, the notable works of the French 20th-century philosopher and historian Michel Foucault on power are still relevant to discourses today, offering a foundation for a better understanding of the relationship between heritage and how it can be used as a tool of power. According to Foucault, power is dispersed across society, rather than conceptualised as a system. Importantly, the knowledge obtained by an individual (or equally a society), is based on *truth* which they have come to believe and follow based on the power phenomenon of the society or group which they are part of. *Truth* here is considered by Foucault to be whatever society accepts as truth, therefore giving it the characteristic of being in constant flux. Such a dispersal of power is termed as *normalised power* by Foucault (1977; 1990) whereby people act within a society according to the norms established by powers such as institutions which form regulations and expectations — therefore exerting influences on society as to what is normal by structuring how we view and understand the world. For example, the law institution informs us of what is correct (moral) behaviour and what is detrimental and immoral, informing us what is normal behaviour from subversive. Such a connection between power and truth is articulated by Foucault as:

Truth isn't outside power, or lacking in power. . . . Truth is a thing of this world: it is produced only by virtue of multiple forms of constraint. And it induces regular effects of power. Each society has its régime of truth, its 'general politics' of truth: that is, the types of discourses which it accepts and makes function as true; the mechanisms and instances which enable one to distinguish true and false statements, the means by which each is sanctioned; the techniques and procedures accorded value in the acquisition of truth; the status of those who are charged with saying what counts as true (1979: 131)

Having established the relevance of power to studies of society and heritage, it is essential to turn to the wide discourses on representation. Representation is an integral aspect in the study of culture; as articulated by Stuart Hall "Representation connects meaning and language to culture" (2003: 15) as we make sense of the world around us according to our

specific cultural categories. Moreover, it can be said that it is at the heart of culture studies: “the central strand of cultural studies can be understood as the study of culture as the signifying practices of representation” (Baker, 2003: 8), as research into culture innately belongs with and is done through representations. The notion of representation can be broadly understood as the processes which signify and stand for another object or practice, thereby symbolically mirroring an objective world. This is an important aspect of culture studies, as it is through the system of symbols of representations that cultural meaning and significance are given and transported; representations give meaning to the world around us—to practices and material artefacts. Consequently, representations have a role to play in the construction of our realities, which we build up around ourselves. This is something which is expressed by Jovochelovitch who elaborates how “the reality of the human world is in its entirety made of representations: in fact there is no sense of reality for our human world without the work of representation” (2007: 11). As suggested by Jovochelovitch, the world around us is made up of representations through systems such as language, imagery, and sound among many others. This is something which is reflected in the work by Stuart Hall on the connection between representation and linguistic communication. Language is one method of creating meaning based on a system of signs, symbols and sounds which stand for the concepts, feelings and people we are portraying to another (2003: 1). Language can be used to represent and construct meaning, communicating knowledge and information. Hall lays out three different theories as to how language may be used to represent the world around us: the *reflective*, the *intentional*, and the *constructionist* each with its own philosophical construction (2003: 5). According to the *reflective* theory, language merely “reflects a meaning of what already exists in the world”, while an *intentional* theory of language is a step apart from reality and the *reflective* only expresses what the utterer desires it to. Lastly, a *constructionist* theory implies that meaning itself is constructed in and through language in polar opposite to the *reflective*. The connection between language and representation is integral to the social and cultural world and one which reveals much more than semantics. Consequently it can be said that thinking and feeling are ‘systems of representations’ whereby they stand for the world around us (Hall, 2003: 4). As highlighted by Moscovici however (1961), the construction of representation itself is not stable; it has been characterised by Moscovici as ‘instable’ and ‘hybrid’ with the construction based upon an intersubjective which is agreed upon under competition. Therefore, representation occurs

within the complex interrelation between “self, other and the objective world” (Jovchelovitch, 2007: 11). Furthermore, Howarth draws attention to the varying scales of representation, from *hegemonic representation*, which is dominating and widely circulated, to the microscale *oppositional representation* which is less circulated (2006: 22).

Representation has been understood as being central to discussions around culture and the production of culture (Hall, 2003: 1). The relation between culture and representation lies partly in the understanding that culture is about ‘shared meanings’ most of which are created through language (Hall, 2003: 1). Hall elaborates on the complex definition(s) of culture by saying “To say that two people belong to the same culture is to say that they interpret the world in roughly the same ways” (2003: 2) enabled through a shared set of concepts, ideas and images. The interaction between culture and representation how we understand the world around us as the cultural context provides the basis and framework for how we interpret objects, practices etc.; how objects are used and how we represent them — whether through language, images, art, music, clothing — reflects cultural nuances and differences. When speaking of a cultural representation, the adjective *cultural* requires closer analysis. The term *culture* itself is a contested one due to its polysemy of meaning, leaving it as a ‘slippery’ and ‘illusory’ category for understanding and describing human behaviour (Bayart, 2005). An overview of the understandings of the term *culture* reveals the numerous aspects it covers and some of the difficulties in forming a single definition. As according to Freidman, culture is broadly conceptualised as “the attribution of a set of qualities to a given population” (1994: 29, while a more multifaceted definition is suggested by Chen whereby: “personal, sexual, national, social and ethnic identities all combined into one” (2006: 12), indicating the complexities and nuanced conceptualisation of defining and talking about *culture*. From a historical perspective, the notion of culture in connection with an identity can be conceptualised as Herzfeld (1997: 192) emphasises with the role of the nation-state in the conception of a ‘cultural identity’. Within Europe, the nation-state has striven to promote and foster a sense of ‘cultural identity’ to maintain cohesion from the late 18th century, otherwise understood by the term *imagined communities* adopted from Benedict Anderson. To elaborate, this connotes a sense of belonging and fraternity within national borders, despite not knowing the other inhabitants leading to the idea of a bounded and imagined community.

However, beyond the definitions and roles of cultural representation, it should be noted that there is an ideological aspect which has been attributed by several scholars to dynamics of power. As stated above, representation can be ideological in the sense of its hegemonic power and influence. This can be understood, for instance, through the power of selection and organisation that are part of representation, suggesting that “representations are not innocent reflections of the real but are cultural constructions, they could be otherwise than they appear to us” (Barker, 2003: 177). It is at this point that power relations are brought to the fore and which is an interesting point to consider in relation to heritage. Amongst the expansive definitions of categories of power, representation has been understood in terms of culturally Othering, the unequal dynamic of representation termed by Edward Said in his seminal 1979 book *Orientalism*; cultural representations have been seen to lead to the creation of the *Other*. Drawing on the concepts of *knowledge/power* from Foucault and Gramsci’s discourses on *hegemony*, Said considers a structure of power situated in the West’s supremacy over the East through the system of Orientalism. By considering the Other in terms of Said’s definition, a conflict is highlighted between cultural groups rooted essentially in the power of the observer⁸ of the other — specifically identified as the West’s representation of the East and Orientalism. This is expressed by Said when he states how “The result is usually to polarize ... the Oriental becomes more Oriental, the Westerner more Western” (1978: 45-46), thus simultaneously establishing a dichotomy whilst questioning whether cultures can be placed within distinct categories. The work of Said has had a huge influence on the humanities and social sciences, especially in regard to the fields of culture studies, art history, anthropology and sociology with an analytical reassessment of visual representations and academic discourses. Despite Said writing within a context of roughly forty years ago, his work on Orientalism is still relevant for many areas of study and provides a spring-board for considerations of cultural representation and the power structures backing the representation of cultures. When discussing Orientalism in terms of art history and visual culture, Linda Nochlin states how Orientalism “cannot be confronted without a critical

⁸ The notion of an *observer* itself connotes a series of power dynamics and the removal of an autonomy and voice through the process of narrating and interpreting other systems of knowledge and cosmologies, which arguably by its nature will always be partial and subjective (Leeds, 1974).

analysis of the particular power structure in which these works came into being”⁹ (1989: 34), writing a decade after the first publication of Said’s *Orientalism*; works of art should be considered beyond a style as they reflect more than a technique when considered within the framework of *Orientalism*. For instance, 19th-century artists situated within the context of colonial expansion and the depiction of an array of representations of other ‘discovered’ cultures. Within this narrative, non-western cultures are arguably transformed into a subordinate representation whereby the West is in control through the act of observation and gazing at another society, which is often de-historical/ de-contextualised, idealised and provocatively portrayed for the Western audience (Nochlin, 1989: 34). Such a use of heritage and culture is linked to the theoretical discussions of semiotics, whereby the way in which we communicate (whether through language, objects or art etc.) is reconsidered in terms of the symbols and signs used and how meanings change and are manipulated. The contributions made by the 20th-century French theorist Roland Barthes on semiotics are famous commentaries on culture and the transmission of meaning, primarily concerned with French advertising and the relation between the words and the image for the transmission of meaning. Accordingly, words can perform two roles in conjuncture with images: either to clarify the images or to clarify what the image means (Barthes, 1977: 38-40). For instance, the image of an apple accompanied with the word “sin” conjures Biblical connotation, as opposed to simply writing and meaning “apple”. Such an awareness of the relationship between meaning and objects/ speech is crucial for understanding the importance of heritage, and consequently of the other. The construction of the other can be analysed in relation to the theoretical framework of Roland Barthes’ work *Mythologies* (1975). Within the work he details the *sign*, *signifier* and *signified* that describes how material culture can be manipulated by (predominantly bourgeois) values as every cultural product (*signifier*) has a meaning beyond the reality of its form (the *signified*) (Barthes, 1977). The *signified* image can be understood as the subtexts beyond its form: “The concept reconstitutes a chain of causes and effects, motives and intentions” (Barthes, 1977: 177) as political, cultural and historical dimensions are brought to the fore. In relation to discussions of the Other, the *signified* illustrates the impact of images and language on cultural artefacts which are imbued with values based on cultural beliefs. Otherness is partly encoded within material culture by

⁹ Nochlin’s chapter is in reference to the 1982 exhibition and catalogue “*Orientalism: The Near East in French Painting 1800-1880*” and the works such as Jean-Léon Gérôme’s ‘Snake Charmer’ (c.1865).

distinguishing cultures and individuals from one another. The representation of another's society and culture is controlled by power structures through material culture, whose meaning is conditioned by ideology through sub-narratives. This illustrates the power images and words have on encoding the world around us, which is particularly complex in regard to heritage with its wide plethora of history and narratives imbuing it with a meaning. Thereby, by juxtaposing visual and verbal forms, the viewer can be influenced how they understand the image. Understanding the theoretical framework of Barthes' *signifier* and the *signified* provides an understanding of cultural material beyond the formations of values and concepts associated with objects. Using the theoretical framework offered by Barthes and semiotics, the concept of the representation of the Other can be understood as being controlled by power structures through the processes of artistic portrayal and the dissemination of these images. This is something which has been noted by Abdallah-Preteille, who reiterates how Othering involves the process of objectifying another person or group or *creating* the other (2003), thereby turning a blind eye to the complexity and subjectivity of the individual or culture. Such cultural essentialism is closely connected with politics of power, and as Said expresses, specifically that of colonialism and Orientalism (1979). This is something which is explored further by Herzfeld concerning the nation-state by describing the issues of cultural essentialism, in specific how "The strategies of essentialism all hinge on creating the semiotic effect technically known as iconicity, the principle of signification by virtue of resemblance" (Herzfeld, 1997: 27). Therefore, cultural elements are imposed on cultures as explanations for behaviour as culture becomes "the essential tool for making the other" (Abu-Lughod, 1991: 143). Within such politics, representation becomes the essentialised homogenous culture which acts as a definition of a complex and diverse cultural body. However such an approach to the study of cultures (and beyond) has its own problematics which arise with the dilemma of how to study and understand other beliefs and behaviours without essentialism and Othering, which is widely considered to be an innate and inescapable process; essentially the question arrives at whether we can understand and communicate people and their principles beyond single labels (such as women, European etc.) to a polysemic interpretation of someone or something other than what one lives and knows. This is something which is widely reflected upon and criticised within academia and other processes of knowledge production; the

academic institutions have a role in working against the biases and stereotypes of the other created through cultural representations and differences.

Therefore, representations are closely connected to how we view and understand not only semiotics forming our world around us, but also those of others. The connection between looking/ seeing and representation is something which requires further attention within the study of the display of heritage. Turning to the field of visual culture we find important ways of understanding cultural material. Visual Culture can broadly be understood as both an academic field and the object of study, as expressed by Mirzoeff “the things that we see, the mental model we all have of how to see, and what we can do as a result” (2011: 11), illustrating its close connection to representation. In relation to representation, the (basic) process of *seeing* and *looking* is hugely significant by reaching beyond the sensory biological level to the cultural and social (i.e. what it means when this right of looking is denied or obscured). The connection between seeing and the material world of objects surrounding us is considered at length by the British essayist and cultural thinker John Berger. Within the seminal work *Ways of Seeing*, Berger articulates how “The way we see things is affected by what we know or what we believe” (1972: 8), indicating a bias of vision informed by our cultural codes. It is also important to consider here the work of the French social scientist Pierre Bourdieu regarding *habitus*, whereby the social and cultural conditions of individuals impact how we see and understand the world around us (1990). Therefore the activity of looking and understanding (or interpreting) is a complex process, partly imbued within the *zeitgeist*¹⁰ and in part informed by individual social and cultural constructions and expectations. While to *see* assumes a passive state, the activity of *looking* is engaged and active — to look is about power and autonomy, as expressed by the visual culture theorist Nicholas Mirzoeff (2011). In his work provocatively titled *The Right to Look* (2011), Mirzoeff draws on topics from politics, power and history to discuss the complexities of how we understand and engage with the world. Lifted from the work of Derrida who coined the phrase ‘the right to look,’ Mirzoeff emphasises how looking can be a political act and how the right to look is equally an act of a claim to the real. In fact, the right to look has been considered by Mirzoeff as “not simply a matter of assembled visual images but the grounds

¹⁰ Berger details how within the Middle Ages the sight of fire differs to ours today due to its correspondence to the belief of a physical existence of Hell (1972: 8).

on which such assemblages can register as meaningful renditions of a given event” (2011: 744), therefore indicating a historical narrative and its very formation informed throughout time by materials surrounding an event. This draws us back to ideas of representation as the assemblage of images and symbols informs an understanding of cultures and the formation of a structure through which cultures look at and understand the world. This is especially pertinent for heritage, which being steeped in history and narratives, visually prompts the viewer towards a historical narrative of its life history. Moreover, within the context of an interview, Mirzoeff informs us that his book *The Right to Look* is aimed at analysing “how visuality is a technology of colonization” (2015), insinuating the power of visual culture and the power structures at play behind the image — this may be issues of representation, misinformation or even ownership as copies of material cultures are reproduced and circulated for any one’s possession. This makes the author’s work particularly relevant for contemporary discussions which have arisen since the conception of Orientalism (as discussed by Said in relation to the Other) with the formation of the internet and technological advancements which have altered notions of ownership and the representation of others. When it comes to heritage, the ability to replicate artefacts in hyper-reality corresponds to Mirzoeff’s message: how colonization can take on new appearances through the incorporation of visual (and material) culture based on technological advancements, leading to an unbalanced power structure based on heritage possession through recreation.

2.2 Digital Reproductions and Representation

Consequently, representations play an important role in our daily lives and beyond, and are integral to processes of communication, the transmission of knowledge and cultural systems of understanding the world. It can be said that the way in which we understand and navigate the world through representations has new boundaries and definitions with the advent of digital technologies. With the attrition of heritage, whether accelerated by motivated attacks, expanding urbanism and agriculture, or mass tourism, there is a need to preserve and conserve heritage and art. It has become commonplace to create digital surrogates within the arts and cultural sectors, especially among what Lorcan Dempsey terms as the *memory institution*, such as heritage museums — increasing public access to cultural heritage and to enable detailed analysis of the artefacts. *Memory institutions* are understood to be public

archival locations holding resources concerning historical narratives, collective memories and cultures, such as libraries, museums and heritage sites among others (Dempsey, 1999; Pessach, 2008). Essentially, “Digital media are used to create cultural content through scanning, modelling, and archiving” (Kalay, 2008: 1) as digital reproduction is widely understood as a surrogate which, “reliably represent ‘real world’ content in a digital form” (Mudge et al., 2006: 1), therefore communicating the empirical features of the heritage material. Such possibilities of analysis and conceptualisation of history are related to studies of representation and the construction of the world around us. Technological advancements have added new dimensions to representational systems, relevantly here within cultural representation. By reproducing the cultural heritage, it becomes possible to analyse the empirical, formulate a digital archive for preservation and democratise the access to heritage (Mudge et al., 2006: 1); such digital reconstruction of heritage is wide-ranging from books/manuscripts, images, paintings to cultural landscapes and environments. As analysed by Mudge et al. within their analysis of a digital future for heritage, they state how the digital surrogate’s purpose is to “reliably represent ‘real world’ content in a digital form” (2006: 1), with the transmission of empirical culture. While the duplication and reproduction of heritage in its many forms into digital formats has many advantages concerning preservation, archiving and dissemination, there are complexities which need to be addressed. It has been argued that part of the authenticity of the artefact — that which arguably makes it original — is lost; discussions lead by the renowned German philosopher and cultural critic Walter Benjamin and the idea of the *aura* contributes to considerations of a ‘reliable representation of the real world’ through technology. Prominently within culture and heritage studies the seminal contribution of the 1936 essay *The Work of Art in the Age of Mechanical Reproduction* by Walter Benjamin opens one of the earliest discussions surrounding the impact of technological advancements (photography and film) on cultural experience and interpretation. Writing within the context of the Industrial Revolution, technology was impacting many aspects of life, from agriculture to entertainment, Benjamin differentiates technological reproductions from “man-made artifacts” which historically “could always be imitated by men” (1936: 49). Conversely, technological reproductions are considered to be incomplete by the author as they lack the authenticity of the original, crucially because the reproduction lacks the original *aura*. The *aura* is defined by Benjamin as an innate aspect of the object of study, indivisibly that of time and space in connection to the object’s life

history; for Benjamin, the photograph is a copy of the image whereas the painting remains the original:

Even the most perfect reproduction of a work of art is lacking in one element: its presence in time and space, its unique existence at the place where it happens to be. This unique existence of the work of art determined the history to which it was subject throughout the time of its existence. This includes the changes which it may have suffered in physical condition over the years as well as the various changes in its ownership. The traces of the first can be revealed only by chemical or physical analyses which it is impossible to perform on a reproduction; changes of ownership are subject to a tradition which must be traced from the situation of the original
(1936: 50).

The loss of what Benjamin considers to be the *aura* can be seen as having the potential to open up the politicization of art, raising questions regarding the reproducible image and its many uses and misuses. In continuation of the discussions brought up within Benjamin's work, Malpas addresses an issue of digital heritage, stating that: "The artwork is not reducible just to the material 'stuff' of which it is made, and yet the artwork is what it is through its concrete spatio-temporal existence, its placed presence" (2008: 15). That is, although the materiality of cultural heritage is important for the understanding of cultural expression — each culture may express itself with its own codes through different medias — it is not the end all. By reducing heritage down to its particular materiality it excludes important aspects such as its interaction with space and objects, with specific (intangible) features. The emphasis on the material existence of the object is thrown into question however with the advent of digital art and reproductions. As highlighted by Doppelhofer, this refers to the old philosophical question as to whether value can be solely bound to materiality (2006: 6).

Moreover, there are debates surrounding the notion implied by Benjamin's theory, whereby Fiona Cameron rethinks the place of the *aura* within the digital realm. By critically examining the assumptions around the dichotomy between the original (material) and the digital copy (immaterial), Cameron reconsiders the value placed on object-centred thinking (2007: 49-50). Cameron argues that within the digital sphere, the role of the *aura* is subverted as the digital acts as its own history and origin — and therefore originality (2007: 67). From

such a perspective, the digital have their own authenticity and life history, separate from the *aura* based within the materiality of the physical object.

When addressing the question of reproducing heritage it is important to consider the work of the French 21st-century philosopher Jean Baudrillard, in particular his writing on the significance of copies and originals within society. Especially relevant are his discussions on the concept of *simulacra*. The author's work covers the themes of reproduction, authenticity and representation with the notion that a material image can be reproduced as something else without the essence of the original, an aspect which sounds familiar to Benjamin's *aura*; however, while Benjamin makes a case for the processes of mechanical production in art as demolishing its aura, Baudrillard believes that the very distinction between original and reproductions are destroyed. Taking this stance, Baudrillard focuses on what may happen when access to the original is denied — in other words reality — in place of replicas; at this point Baudrillard considers the entry into a *hyperreality* whereby the copy has no original and is cut off from reality. Therefore, as articulated by Baudrillard, "It is no longer a question of imitation, nor duplication, nor even parody. It is a question of substituting the signs of the real for the real" (1981: 2). Significantly this indicates that the distinction between reality and simulation or copies are oftentimes blurred or indistinguishable, therefore undermining reality itself.

Moreover, the intersection of digital technologies with that of material heritage raises considerations of the translation of the tangible into the immaterial and the new status of digitally influenced heritage. Within the fields of culture and art (such as anthropology, art history, sociology etc.) the discussions are situated around issues of authenticity, representation and preservation. Firstly, it must be stated that there are numerous benefits and advantages of reproducing objects of art and cultural artefacts, many of which could be seen as mostly self-explanatory. Digital replicas of heritage not only enable audience interactions in the setting of the museum and for study by students and academics (Katz and Tokovine, 2017), but they also influence the nature of analysis; digital copies of heritage collections within the museum have been considered as necessitating new ways of thinking about the past, as expressed by Cameron and Kenderdine: "digital technologies have transformed the traditional museum, altering our understanding of such fundamental words

as *indigenous, artifact, space, ecology, the past*” (Cameron and Kenderdine, 2007: ix–x, emphasis in original). This is something which is also expressed by Newell through comparing the new advantages of digital heritage: “While classical historical endeavour privileges the linear narrative, the kaleidoscope of perspectives that a digital research environment can convey encourages thinking and history-telling from a variety of vantage-points” (2012: 290). This includes previously inaccessible heritage which is now available (online), such as the British Museum’s extensive ethnographic photograph collection from their Department of Africa, Oceania and the Americas, as highlighted by Newell (2012). Furthermore, the digitalisation of heritage, be it singular artefacts or extensive heritage sites, are accessible in new ways. Impressively this includes the study of the intangible heritage and practices of sound (music); Dr Rupert Till’s lab (associated with the University of Huddersfield, the U.K) has developed a free app¹¹ for the acoustic spaces of Stonehenge, the Cave of Altamira in Spain, and the Paphos Theatre in Cyprus for the public to understand how music would have interacted in the different spaces (Till, 2017). Similarly, the work of Miriam Kolar has been focused on the analysis of acoustics at the Peruvian site of Chávin in order to understand the interaction of sound in the space to recreate the intangible heritage of the space (Kolar, 2013). Lost ancient music has also been recreated through three-dimensional recreations of the instruments, which otherwise are too delicate to play, such as the 3D modelled ancient pan flute from Egypt which digitally reproduces the tones it would have produced (Avanzini et al., 2015). Therefore, through a fusion of the digital and the cultural new possibilities arise for understanding and conceptualising heritage and past cultural practices.

However, despite the apparent advantages, concerns have been expressed among scholars from the fields of heritage studies and cultural studies. They are mainly concerned with access to the original (material) artefact as access to the original collections are restricted (Newell, 2012: 290). A very pertinent problem is that of ownership and access; questions arise of how to collect and document the data, what methods should be used, which technology should be used to enable future access? All the questions affect what you see and

¹¹ For further information please visit the EMAP Soundgate App, developed by Rupert Till (2017) for Android <https://play.google.com/store/apps/details?id=com.UoH.EMAPMusicProject&hl=en> and for iOS <https://apps.apple.com/gb/app/emap-soundgate/id1207687938> (Last accessed January 14, 2023).

how you interpret culture and history, therefore fundamentally influencing access and interpretations of history. Consequently, questions of digital conservation arise: which data should be preserved by institutions and archives and according to what criteria should data be excluded? (Mudge et al., 2006). This also raises the question of which type of institute should be responsible for conserving digital data, heritage, and cultures. The integrity of the museum is put into question considering its colonial and hegemonic organisation. Rather than moving away from a decolonialisation of heritage, the storage of digital heritage within the museum could be recognised as a new form of colonialism. Always looming on the horizon is the cost, introducing a problematic parameter which ultimately challenges the use of technological development in digital heritage practices and conservation.

Having considered the multifaceted nature of digital reproductions, an obvious question arises: what is the relevance of the original now that an identical (and more accessible in many cases) replica exists? This is something which lies at the heart of discussions surrounding digital reproductions and something which will be considered further in more detail in Chapter 3 in the critical analysis of the Bamiyan Buddhas.

In light of the discussions surrounding representation, digital technologies and heritage touched upon within the chapter, new aspects for conversations are facilitated. As stressed by Kalay, digital reproductions of cultural heritage are not neutral, “like every medium ever used to preserve cultural heritage” (Kalay, 2008: 1), which raises many interesting points of debate. Due to its connection with systems of representation, Kalay notes how digital reproductions can impact both the cultural information being represented and how society (or an Other) interprets it (2008: 1). Essentially, digital reproductions have “the potential to affect the very meaning of the represented content in terms of the cultural image it creates” (Kalay, 2008: 1), drawing us back to discussions of the power of representation (Abu-Lughod, 1991; Abdallah-Preteille, 2003; Said, 1979); as highlighted above, there exists a close connection between issues of representation and the formation of cultural identity, whether through the nation state or within the context of a museum or art gallery.

Consequently, the power of visual material is instrumental in how we organise and navigate the world around us, forming cultures and by extension *others*. Therefore, it is important to

understand the nature of the visual language being displayed. When addressing visuality, several important aspects have to be discussed, primarily the global nature of visual material available in today's globalised environment. It can be said that information is democratised with the advent of the World Wide Web through global dissemination. However, through critical analysis, it becomes clear that there are other processes which need to be investigated which highlight the complexity of the issue. Importantly the mass circulation of images and information aided by the internet and social media requires an analysis on the level of what these images are used for and what they are representing. More specifically, how global powers may be utilising visuality and the widespread of the internet, in turn directing us to the well-versed questions of power, hegemony and also visuality. Within the context of the representation of war, the devastation of Iraq was globally broadcasted, which according to the Mirzoeff was partially strategically planned; Mirzoeff considers an intersection between power and the use of images which become politicized through the connection between digital media and the democratisation of truth in relation to the war in Iraq (2003-2011). Within his ground-breaking book *Watching Babylon: The War in Iraq and Global Visual Culture* (2005), the author investigates the impact of global visual culture's role on watching the war in Iraq. Taking Babylon as a threefold metaphor of the historic site, contemporary Iraq and the reimagined West's perceptions, Mirzoeff considers "the ways in which images have become weapons in the military-visual complex" (2005: 13). Therefore, Mirzoeff puts forward a case concerned with "the consolidation of power as a visualised model of reactionary globalisation and the place of people as visual subjects within that system" which also "examines what it means to watch images of the exercise of power on a global scale from specific localities" (2005: 3). Babylon becomes a complex metaphor containing its extended history and status as a religious epicentre, the many conflicts fought for its occupation as well as the dimension of the acquisition of its material cultural heritage, for which the Berlin Pergamon Museum was built to house. In short, Babylon exists within the imagination as an ancient location which is partly owned within museums across the world as well as being instrumental in the formation of the Oriental mythical West and East, as articulated by Said; on the other hand, Babylon also signifies Iraq as a contemporary peak of war and politics, to which audiences have been bombarded with images at every turn; such a saturation of images from the war is strategic for the result that the audience loses its criticisms and therefore effectively normalises the activities of international interventions

within the Iraq war (2005: 14). Such an analysis of the media and the use of images may be understood in terms of Foucault's *normalising Power*, from his 1977 work *Discipline and Punish*, as the public reaction to the Iraq war was widely and gradually normalised. Therefore, the author aims to utilise the framework offered by visual knowledge to unite the past, present and future of Babylon in order to engage with the politics, beyond the theoretical:

That is to say, what we can learn from this intersection of pasts, present and future is the current status of visual knowledge and its possibilities. What results is then a politics, rather than a universal theorization, like the master-slave dialectic.
(2005: 10)

Such an application of contemporary visual material culture illustrates one face of the complexities of digital dissemination, within the context of war and politics. Another complex issue related to the topic of digital representation is that of the 'ownership' of heritage once copies are published in online archives, such as the platform *Google Arts & Culture*¹². Despite the advantages of a more democratised approach to the access of heritage and the arts provided by the platform, there are many deliberations about the copyright of the replicas. In particular the partnership with organisations such as CyArk¹³, whose aim is to 3D scan heritage sites across the world in order to preserve and rebuild them, raises questions about the implications of digital ownership. It transpires that CyArk owns the copyright of the digital 3D scans of heritage sites, rather than the countries where the heritage resides and originates from (Sydell, 2018), complicating notions of ownership with a juxtaposition between legal ownership and cultural/ historical ownership. This has led to fears over Google's involvement in the heritage and arts sector as its been criticised for merely being a global company meaning "at its core, it's all about advertisements and driving traffic" (Watrall, 2018) because it's a free search engine.

¹² The Google platform provides unique access to collections from around the world, allowing for a virtual tour of partnered institutions and high-resolution zoom options on specific pieces of work, available here <https://artsandculture.google.com> (Last accessed April 21, 2023).

¹³ For more information about CyArk please visit their website: <https://www.cyark.org> (Last accessed April 21, 2020).

2.3 Iconoclasm: Definitions and Implications

In relation to the power of looking and representation, the study of iconoclasm is an important phenomenon to discuss. The thread between heritage and power can be seen to be continued with the discussions surrounding iconoclasm; although not directly related to the importance or necessity of heritage, iconoclasm draws attention to the power elicited by the artefact. The intentional and motivated destruction of heritage is something which is timeless and ubiquitous. Across the centuries cultural heritage has been symbolically vandalised and destroyed, whether for religious, political or cultural gains. Widely defined as the destruction (or at least the mutilation) of art and heritage (from paintings to monuments and buildings), iconoclasm can be understood as an attack against the power and authority transmitted through the artefact; by damaging the artefact, which is an extension and symbol of the power itself, the aim is to damage to order behind it, be it the state or a religion (Freedberg, 1985: 25). The term *iconoclasm* grew out of the destruction of religious images and iconography, with the aims of overthrowing institutions and beliefs (Gamboni, 1997: 18). As articulated by Bruno Latour, iconoclasm is based on the belief that icons are representative of something unearthly and unattainable, such as the image of God — and therefore in opposition to human materiality and depiction (2001: 18). However, when the human hand is visible within the creation of an icon it ‘weakens’ it because

To show that a humble human painter has made them would be to weaken their force, to sully their origin, to desecrate them. Thus, to add the hand to the pictures is tantamount to spoiling them, criticizing them

(Latour, 2001: 18).

This also applies for the destruction of icons, whereby the damage proves that it is a mere image representing man’s image of the sacred. The author also asks whether the very fact that the hand of man is present in the creation of the icon makes it more powerful by

*Increasing*¹⁴ instead of decreasing its claim to truth?..... We could say, contrary to the critical urge, that the more human-work is shown, the better is their grasp of reality, of sanctity, of worship. That the more images, mediations, intermediaries, icons are multiplied and overtly fabricated, explicitly

¹⁴ Emphasis present in the original text.

and publicly constructed, the more respect we have for their capacities to welcome, to gather, to recollect truth and sanctity (“religere” is one of the several etymologies for the word religion). (Latour, 2001: 18)

With the power of the image or icon in mind, the presence of a motivation behind the attack is a crucial feature, which according to Gamboni, distinguishes iconoclasm from ‘mindless’ and ‘barbaric’ vandalism (1997: 18); in fact, “The very act of iconoclasm testifies to the mysterious — and often threatening — power images can hold over us” (Freedberg, 2001). Moreover, the acclaimed professor of History of Art, Freedberg, categorises two different types of iconoclasm, which are always generally motivated and situated around the discomfort stimulated by images. The first he categorises is the destruction of paintings and artefacts because they are understood to be imbued with those that they represent, such as religious figures (Freedberg, 2001). This is characteristic of the 8th and 9th century Byzantium iconoclasms based on the objections of the use of images as cult objects and against the wealth and the power of the Church at the time (Gamboni, 1997: 28). The second category defined by Freedberg is the destruction of symbols which represent a larger body to be overthrown. For instance, this can be seen in the politically motivated actions of the French Revolution, the dissolution of the Soviet Union with the toppling and destruction of monuments and art and the slashing of Princess Diana’s portrait at the London National Gallery (in 1981) by an IRA sympathiser (Freedberg, 2001).

The notion that the image or structure has a hold on the viewer which needs to be broken is a large part of the study of iconoclasm. This, therefore, indicates the power imbued within heritage and art, which is attacked in the hope of destroying its power and reacting against an order (religious, political, national etc.), to “testify to the threat that seems to be posed by the anomaly of thinking that life — a living body — exists in the image made of dead materials” (Freedberg, 2016: 75). However, there are other explanations of iconoclasm, notably that of attention-seeking politics (such as the case with IS and their performative destructions of heritage) often associated with raising publicity at the same time (Freedberg, 2016: 87). This is something which is touched upon by Latour, who lists four different (although overlapping and ambiguous) categories of the iconoclast. One such type — type C — destroys images to attack their opponents, targeting pieces valued by their rivals, and a “well-known mechanism of provocation by which, in order to destroy someone as fast and

as efficiently as possible, it is enough to attack what is most cherished, what has become the repository of all the symbolic treasures of one people” (Latour, 2001: 28).

Religious based iconoclasm is still a powerful tool used within the context of war, used as a strategy to destabilise and occupy territory — as witnessed during the Balkan’s War (1991-1999) (Barakat et al., 2001: 168). Moreover, “it is enough to remember the reactions to the destructions of the Bamiyan Buddhas by the Taliban in Afghanistan, to realize that religious images are still the ones that attract the fiercest passions” (Latour, 2001: 20). Therefore we return to the discussions around culture and materiality, with the material object being imbued with significance and memory via social and cultural processes. The need and desire to attack heritage and work of art attests to the destruction of the meaning and symbolism represented within the piece, whether its religious ideologies, attacks against history and the nation-state or individual unrest.

When considering the phenomena of iconoclasm, the motivation and consequences behind the action are important to understand. Therefore, the approach offered by *iconoclash*, as explored by Latour, provides an analysis of the category of iconoclasm from various broad perspectives such as the goal of the iconoclast, the role the artefacts are given after being destroyed, and the effects of their destruction on those who valued them (2002: 26). Latour explicitly states however that “It is of course impossible to propose a standardized, agreed-upon typology for such a complex and elusive phenomenon” (ibid: 26), when categorising iconoclasm. *Iconoclash* is a study whereby the purely destructive connotations of *iconoclasm* (to break) are reconsidered. *Iconoclashes* can be understood in juxtaposition with iconoclasm by the fact that within iconoclashes lies an uncertainty about what has been committed with the destruction of images. In other words, as Latour states: “iconoclash... is when one does not know, one hesitates, one is troubled by an action for which there is no way to know, without further enquiry, whether it is destructive or constructive” (2001: 16). Such an understanding and criticism of iconoclasm readdressed the notion of destruction, as rather than the complete devastation and loss of an object a new form has the possibility of being devolved; iconoclash provides the opportunity for transformation. Not only does this enable a reconsideration of the nature of destruction and the possibilities of it being

constructive and transformative¹⁵, but it also inverts the notion of preservation: “By restoring works of art, beautifying cities, rebuilding archaeological sites, they have destroyed them, their opponents say, to the point that they appear as the worst iconoclasts, or at least the most perverse ones” (Latour, 2001: 30).

The topic of representation can therefore be seen to cover an expansive area of Culture Studies and crosses many important areas of study. In connection to heritage studies, the study of representation can offer a stepping-stone towards understanding the significance of the destruction of heritage. By understanding the representational theories behind cultural artefacts, a new perspective is offered for the selection and destruction of cultural heritage monuments, particularly within the context of war and conflict.

¹⁵ See page 18, Section 1.4 regarding the city of Hue, Vietnam, for further discussions of the transformative properties of ‘destruction’ and a reanalysis of the notion of ‘destruction’.

Part II

CHAPTER 3:

ICONOCLASM AND DIGITAL RECONSTRUCTION

Having outlined key theoretical discourses surrounding the complexities of heritage, representation and the reconstruction of material heritage, a study of three case studies follows in the ensuing two chapters. Drawing on the theoretical context laid out within the dissertation, an analysis of the recreation of three cultural heritage artefacts — the Bamiyan Buddhas, the Lion of Mosul and the Palmyra Triumphal Arch — violently destroyed in the processes of conflict and war will be carried out. Iconoclasm and digital technological reconstructions are connected as the loss of heritage resulting from targeted attacks. Within this chapter, the reconstruction of heritage will be considered and possible implications of reversing the material damage it originally sustained with the use of technological techniques. However, whether the digital reconstructions can be considered the original is still a question for consideration.

With the use of advancing technologies, the reconstruction of heritage becomes more viable and malleable with various distribution platforms available from the material museum settings to the virtual archive, be it interactive, private or open access. Iconoclasm and the importance of cultural heritage are intricately linked, proving even more incentive to materially reconstruct what has been destroyed, in the hopes of reversing the intentions of iconoclasm to permanently mar artefacts (Freedberg, 2001). The possibility to hyper-realistically reproduce them using digital technologies such as 3D printing, online 3D simulations and holograms can be understood as such a force of resistance against iconoclasm by resituating and recreating the targeted heritage artefact. By analysing the case studies of the Bamiyan Buddhas (Afghanistan) and the Lion of Mosul (Iraq) within this chapter, I will consider the political and ideological aspect of iconoclasm. Both of these cultural heritage artefacts were destroyed in targeted attacks by IS and the Taliban. In February 2015, IS stormed the Mosul Museum and attacked the Lion on Mosul with sledgehammers, along with other artifacts held within the museum, and earlier in 2001 the Taliban blew up the towering Bamiyan Buddhas out of the cliff face where they were situated. Heritage becomes the go-to for ideological and political control of geographies with

the cultural and historical cleansing of ethnic and religious groups alongside the destruction of cultural heritage (e.g. the violence felt by Iraqi Yazidi's at the hands of ISIS from 2014 onwards and the destruction of their tangible and intangible heritage (Fobbe et al., 2019). This is not a new phenomenon, but a tool that has been used over the centuries to assert power and control of territory and populations¹⁶. Consequently, it is reasonable for us to see cultural heritage as a source of power utilised as a strategy of destabilisation. This is important for the study of heritage because within the spectrum of iconoclasm, political and ideological driven image breaking is significant. Precisely because of the importance of heritage within society, its destruction can be utilised within the processes of war. This is something which will be developed further within the following case studies, as the wider narrative of conflict and politics is touched upon to further analyse the destruction of heritage, specifically within conflict zones. It is crucial to remember here Stuart Hall's stance that heritage and imperialism are intrinsically linked as heritage is always political with the embodiment of the nation, idea and tradition (1999). Considering what has been discussed previously in Chapter One about the complexities of heritage, it becomes clear that heritage contains power — such as historical, political and religious. As discussed earlier, this power can be abused, perhaps most strongly with iconoclasm because the perpetration of iconoclasm — as opposed to the random nature of vandalism — is within defined terms of destruction for a cause. By destroying, and therefore removing, cultural heritage from the public space a direct statement is made against a particular group(s). However, within the 21st-century, it is now possible to recreate and reproduce numerous copies of cultural heritage artefacts. There are, of course, limitations to digital reproductions, notably the selection criteria of which objects to reproduced and which aren't. This is something expressed by the curator Iris Veysey, highlighting that “In recent conflict zones like Iraq and Syria, who gets to choose what is most important to salvage and what deserves the world's attention?” Forbes, 2019), drawing attention to an important aspect of digital heritage reproduction. By taking the examples of the Lion of Mosul and the Bamiyan Buddhas, which were both victims of iconoclasm, I will address the relationship between iconoclasm and digital reconstruction. Not only are the artefacts preserved, but they are also transportable in a way never before possible: downloadable, within digitally interactive platforms and printable as 3D objects.

¹⁶ See Chapter 2, Section 3 regarding the political and ideological uses of iconoclasm.

The selection of these two examples is based on several factors, primarily that they were both destroyed by in targeted attacks of iconoclasm, driven by the radical ideology of IS and the Taliban. While IS, Taliban and al-Qaeda may be considered synonymous forms of a radicalised Islam, they are distinguished by the fact that the Islamic State (IS) is an affiliated branch of the Iraq based al-Qaeda within Syria, formed in 2013 and officially centralised in northern Syria in 2014 by Baghdadi (Caris et al., 2014: 9).

Using the paradigm of Latour's iconoclasm, the chapter will aim to go beyond the destruction of the original to questions of the notion of destruction and the formation of a new category of object. Taking the phenomena and literature of iconoclasm, Latour proposes a new discussion surrounding image breaking which enables insights into aspects beyond the destruction (the *clasm* of iconoclasm) to motivations behind image breaking and further analysis of its effects. This applies to both case studies as one is given a new (im)materiality while the other is recontextualised within the Imperial War Museum (London) and archived on the *Google Arts & Culture* platform. After their destruction, both artefacts gained international interest and since are included within the current exhibition *Culture Under Attack* held at the Imperial War Museum (IWM) in London. The Imperial War Museum's exhibition *Culture Under Attack* opened in July 2019, explores several dimensions concerning the threat and destruction of heritage within the context of war. Divided into three sub-exhibitions, the exhibition allows for a wider study into the impact of war on cultural heritage (tangible and intangible) with *What Remains* considering the 'weaponization' of heritage while *Art in Exile* concentrates on British museums during WW II and the protection of their collections and *Rebel Sounds* demonstrating the role music had in resisting war and oppression in recent history¹⁷.

Before commencing with the discussions within the following two chapters, it is paramount to highlight certain biases and limitations in understanding heritage within the Arabic world. In particular there is the inherent epistemological issue of how heritage is valued and understood differently in the Western world and the Arabic. Addressing the reproduction of

¹⁷ Meilan Solly, "Lion of Mosul Statue Brought Back Through 3-D Printed Replica", *Smithsonian*, July 8, 2019 <https://www.smithsonianmag.com/smart-news/3-d-printed-replica-ancient-sculpture-destroyed-isis-goes-view-london-180972577/> (Last accessed November 3, 2022).

heritage requires a consideration of the effects it may have had on the cultural basin from which it derives, and therefore a culturally specific awareness of the terms ‘heritage’ and ‘authenticity’. This is something which has been studied by the Arab philosopher ‘Abed al-Jābri in the 1980s, who distinguishes the philosophical trajectories of the Western tradition and the Arabic from the 17th-century onwards, trajectories that significantly shaped modern conscious and our attitudes towards heritage and authenticity (2011: 182). ‘Abed argues that due to the 19th-century turn of the Arab renaissance, Arab scholars began to understand heritage as disconnected from contemporary identity and society, conversely to the Western world. Consequently, he posits that authenticity and contemporaneity appear to be split within the Arab consciousness, leading ‘Abed to call for a reconceptualization of heritage from within the Arab world (2011: 175). The conceptualisation of a split between heritage and contemporaneity signifies an alternative construction of the past and the present through material culture, where “it is not a matter of replacing the present with the past, or of replacing the new with the old. Rather, it is one of rebuilding our consciousness of the past and the present and of re-conceiving the relationship between them” (2011: 184). Therefore, discretion is required when approaching heritage with an understanding of the historical and cultural narrative in which it is embedded.

Heritage destruction undertaken by both IS and the Taliban, as part of their ideology and political and religious beliefs, is frequently promoted to disseminate their core ideas. Utilising online platforms, namely their website, Twitter and YouTube, IS frequently release video footage of their destruction of heritage, which is disseminated for further global impact (Caris et al., 2014: 10; Zarandona et al., 2018). It can be said that iconoclasm has taken on a new form, something which has been tailored for an audience, indicating its performativity (Harmansah, 2015). By dispersing their material online on open access platforms, IS creates intense publicity for their iconoclasm which is exacerbated by the media, creating a spectacle and a show. Such a strategy has been studied by Smith et al. who consider the role of social media in the destruction of heritage as ‘Socially Mediated Terrorism’ (SMT): “the use of social and networked media to increase the impact of violent acts undertaken to further a social, political and/or religious cause with the aim of creating physical, emotional or psychological suffering that extends beyond the immediate audience” (2015: 10). This is a crucial crossover between heritage and digital technologies as iconoclasm is transformed

from its previous local confines to become an online sensation — something which is prevalent in each case study. The use of digital technology by IS and the Taliban has to be addressed due to the way in which it enlarges the act of iconoclasm. The use of videos by IS is something which is accepted globally and has become a means of verifying the destruction and damage of authentic and original heritage sites by academic specialists (Harmansah, 2015). However, the acceptance of the videos as documentary and archival evidence is questioned by Harmansah who considers them as ideological tools by analysing why and how they are produced, with a focus on their performativity. By addressing the performativity of the videos, Harmansah discredits the general narratives of IS iconoclasm being presented as barbaric acts in line with the earlier forms of medieval iconoclasm, in favour of one whereby it is, in fact, an ultra-modern new face of iconoclasm to disseminate their message online (2015: 175-176). Similarly, Caris et al. express the complexity behind the IS propaganda as “ISIS has been broadcasting its military and social programs with photos, videos, graphic art, and print media as part of a sophisticated political campaign” (2014: 10), refuting the idea of meaningless destruction. The videos are highly staged with an awareness of the audiences they are reaching as they are selective with what they destroy and are image-conscious to create a unified representation of themselves through their clothing and image (2015: 176). Consequently, such a form of iconoclasm can in fact be understood as *iconoclash*, whereby the images of war, and by extension heritage smashing, are circulated within the public sphere of news reports and online open access platforms, perpetuated by ‘capitalist technologies’ (Harmansah, 2015: 176). Therefore, IS itself, and its output of cultural destruction, is part of the modern system (Harmansah, 2015: 175), where iconoclasm is broadcasted within economic systems of the media. This can be understood with the destruction of cultural heritage such as the Lion of Mosul (destroyed in 2015) and the west Bamiyan Buddha (destroyed in 2001), both of which were filmed as they were destroyed, to later become ubiquitous images of the terror of IS and the Taliban, as faces of their war on culture. Consequently, within this context, the reconstruction of the two artefacts can be considered as a retaliation against their destruction, enabled by the use of digital technologies; the Lion of Mosul was recently reproduced after the original was destroyed, using 3D printing technologies, while the western giant Bamiyan Buddha was recreated in situ using holographic technologies in 2015.

In connection to the action of iconoclasm and the subsequent creation of technological reproductions is the idea of the authenticity and the 'original', as theorised by Walter Benjamin's *aura*. As developed by Benjamin, the materiality of the artefact is inseparable from the original, within which its authenticity is located. Accordingly, an artefact cannot be reproduced as a copy and still be considered authentic and original, as the *aura* establishing its originality is lost, which are the dimensions of time and space specific to the artefact that inform its unique history and appearance. In regard to the 3D printing of the Lion of Mosul and the recreation of the west Bamiyan Buddha, questions of authenticity and Benjamin's *aura* play into the reproductions with the loss of the original material structure.

It is therefore apparent that digital technologies are changing the way in which heritage is engaged with and defined. Not only are 3D printed artefacts being translated into the digital, but heritage itself becoming digital. This is particularly pertinent for the reproduced projection of the Bamiyan Buddha, as the hard material form becomes immaterial, evoking the image of the real thing without its tactile substance. Digital technologies imply a reconsideration of cultural heritage and the system within which it circulates, as longevity becomes an important feature of digital copies, ensuring its presence in a digital network. This is a feature that holds true for 3D printed reproductions, as the digital processing facilitates endless copies and prints of one original. Heritage is circulated within online platforms, from photo archives to augmented reality simulations of museums and galleries, accessed via the internet. Concerning how we see and measure the world around us and beyond to other geographies — be it through drones, the cinema or digital media content — considerations of the ideas and works of Mirzoeff are relevant with the assessment of the lens and screen. As articulated by Capeloa Gil, how we are engaging and thus experiencing violence has changed due to technological advancements (2012). Consequently, a wider shift within the interaction with, and understanding of heritage is visible, completely transforming the life history of a heritage object as it is transformed into a digital system.

Although the destruction and attrition of heritage is by no means a new phenomenon, the conditions have changed, as have the methods of reproduction. Consequently, the protection and safeguarding of heritage and the arts is becoming more and more required, calling for new methods of ensuring its safety; with the advent of digital technologies, the adverse damage sustained to art and heritage can be reversed. Digital technologies facilitate new

techniques of restoration, as well as the possibility of a complete recreation; despite the destruction of an original, it is now possible to physically rebuild it — a statement in itself against iconoclasm. Within this intersection between heritage and digital technology, there are several notable examples where the complete restoration of an artefact has been achieved through reproduction. These include the Roman Palmyra Arch, located in Syria; the Mosul Lion from Iraq; and the Bamiyan Buddhas of Afghanistan, all of which were destroyed to varying degrees, only to be reproduced as 3-dimensional prints or holograms. Each reproduction differs from one another and raises different questions. While the Palmyra Triumphal arch was 3D printed as part of an international effort and toured several countries as a symbol of defiance against terrorism, the 3D printed replica of Lion of Mosul was exhibited within the Imperial War Museum of London (IWM) as part of the larger exhibition on iconoclasm *What Remains*. On the other hand, the west Bamiyan Buddha was recreated in situ within its original niche using temporary holographic technologies by two Chinese artists. Connecting each of the cultural heritage artefacts is their location within areas where they were directly affected by war in targeted attacks of iconoclasm. Despite the advantages of the impacts felt by digitally reproducing and repairing heritage, there are implications to be considered in connection to its effect on the category of heritage and history. It is crucial to bear in mind what Holtorf (2001) terms as the idea of the past as a non-renewable resource; by addressing the advantages of new technologies in recreating heritage, Holtorf criticises the side effect of it becoming more acceptable for sites to be destroyed as long as there is enough documentation to reproduce the original (2001: 294). This is something which will be developed further within this work in relation to discussions surrounding the ideas of the ‘original’ and the ‘copy’ and the role of recent technological reproductions of heritage. This is particularly applicable for 3D printing technologies and online simulations of sites and artefacts, which precisely render the heritage artefacts. Moreover, this leads to questions of biases and selection, concerning which heritage artefacts should be included and which excluded in digital archiving and recreation; not everything can be preserved in the digital, but who decides what is? This is something which I will be addressing in more depth with the recreation of the Triumphal Arch of Palmyra in Chapter 5, to further get to grips with the more subtle and politics and cultural implications behind its recreation.

3.1 The Bamiyan Buddhas: The (re)Construction of Heritage

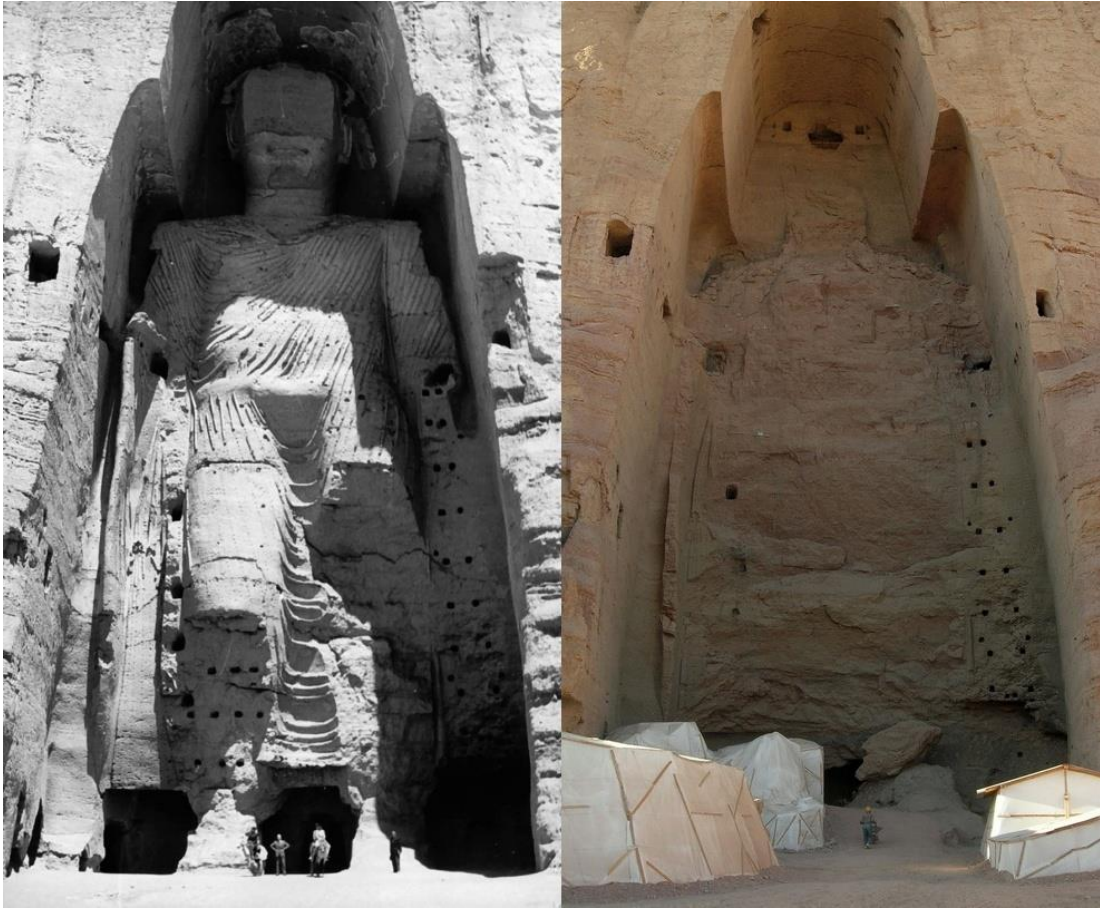


Figure 3.1 – The Western Bamiyan Buddha, Afghanistan, before and after its destruction.
Wikimedia Commons

https://commons.wikimedia.org/wiki/File:Taller_Buddha_of_Bamiyan_before_and_after_destruction.jpg

The Bamiyan Valley, located within the central Hazarajat region of Afghanistan in the Kush Mountains, is part of a valley system with the adjacent Foladi Valley and the Kakrak valley. The Bamiyan Province is saturated with numerous historical sites in varying degrees of preservation — such as the remains of several fortresses, cave networks and desert pit-stops known as caravans — which are all overshadowed by academic studies on the Bamiyan Buddhas (Lee, 2006). As highlighted by Wyndham, since their destruction, the international interest and discussions of the heritage of Afghanistan have been dominated by the Bamiyan Buddhas (e.g. by Holtorf, 2006; Colwell-Chanthaphonh, 2003; Francioni and Lenzerini, 2003; Centlivres, 2008; Morgan 2012; Harrison 2013: 182– 192) surrounding their destruction and methods of reconstruction. These three valleys are one of the many remnants

of Afghanistan's rich cultural and religious history, specifically its pre-Islam Buddhist history: the archaeology of the region is prolific with numerous religious structures across the ages (Feroozi et al., 2004: 8). This diversity covers pre-Islamic remains from Zoroastrianism (prevalent during the 9th century B.C to 3rd Millennium A.D) (Jackson, 1893), Buddhism (which flourished from the 1st century A.D to 7th century A.D) (Hartman, 2003; Runion, 2017), and Hindu practices and beliefs (emerging in the region from the 2nd millennium B.C and flourishing again from the 4th to 6th century A.D) (Witzel and Jamison, 1992). The advent of Islam in Afghanistan corresponds with the Arab invasion of 652 A.D, and by the 12th century A.D it became ubiquitous within the region until this day (Green, 2017). The heritage sites of the valley are a testament to this expansive cultural heritage of the region and represent not only the religious but also artistic developments in the region from the 1st century A.D to the 13th with the integration of various cultural influences across the centuries. Situated within this rich cultural basin stand the two monumental Bamiyan Buddhas carved out of the cliff face of the Bamiyan Valley. The largest (western Buddha) stands at 53 meters (174 feet) accompanied by another (eastern Buddha) at 35 meters (115 feet) tall. For my analysis I will be using primarily the larger western Buddha which was temporally reproduced as a hologram following its destruction. Located on the northern cliff face of the Bamiyan Valley, these two monumental statues stand in the frontal perspective, impressively towering across the valley. Both statues were carved directly out of the cliff face before being covered by a refining layer of clay to perfect and accentuate their form and details, as well as acting as a foundation for paint to be applied (Bländsdorf and Melzl, 2010: 201). Additionally, the valley is home to roughly 1,000 caves and tunnels—many of which surround the Bamiyan Buddhas within the cliff face—which were occupied as places of worship with the remains of monasteries, chapels and sanctuaries as well as many fresco paintings representing religious scenes and decorations, inspired by Buddhist iconography (ibid: 8). Not much is known about the Bamiyan Valley during its Buddhist history, partly due to a lack of historical documentation, however the survival of a text written by a monk in c.630 A. D describes the presence of three giant sculptures near the central convent¹⁸. After the spread and domination of Islamism in the region by the 10th century the site wasn't 'rediscovered' until the 18th century by Western 'adventurers' and military campaigns, from

¹⁸ The Chinese monk known as Xuanzang provides an insight into the Bamiyan Valley in the 600's with descriptions of structures and the territory in his text entitled *xi you ji* ('The Journey to the West'). For more information see Bländsdorf and Pretzet, (2010: 18).

which many detailed sketches were produced (ibid: 19). The Buddhas have been the focus of targeted destruction for centuries, leaving them partially disfigured over time with both arms missing from the statues and the west Buddha's legs destroyed. It is recorded that in 1221 A.D, with Genghis Khan's siege of Bamiyan, the site was damaged and the two Buddhas are thought to have suffered mutilation (Blänsdorf and Pretzet, 2010: 18). Their successive damage however reiterates their "...importance for the definition of the cultures, ideals, and achievements of the people who created, used and live with them..." (Parry and Burnham, 2001: 3), indicative of the importance and role cultural heritage holds in defining cultures. Unfortunately, this highlights the destruction and attrition faced by the archaeology and heritage of Afghanistan in recent years.

From the Taliban's destruction of the numerous irreplaceable sites and museum to clandestine looting activities, the cultural heritage of Afghanistan has suffered over the last few decades. The political dimension of Afghanistan has to be considered when addressing its cultural and historic dimensions as the political sphere has direct consequences on the latter two. Afghanistan has a long history of conflict and war, which has in recent years devastated the country and its national heritage (Hammer et al, 2017: 2). The complexity of the political background of Afghanistan cannot be covered within this work beyond several key aspects which are highlighted to inform the context of the destruction of the Buddhas. From the political context of the Soviet-Afghan war (1979-1989) with the clashes against the Soviet presence within Afghanistan, a period of civil unrest follows for which the Taliban emerge led by Mullah Mohammad Omar (Falser, 2009: 158). Rising out of post-Soviet Afghanistan in the 1990s, the Taliban (meaning 'seekers', often in relation to the knowledge of Religion (Fatima, 2014: 37)) gained control of the country in 1996 under whose governance an adapted Sharia law was formed with countless decrees issued in relation to the position of women, education and employment among many others (Fatima, 2014: 40). A combination of the influence of Islam understood under Wahabbism and the local Pushtun tribal beliefs formed an extreme belief system whereby "profanation, vengeance and eradication of not only others but even the cultural values by imposing their ideology on others" was legitimised (Reza, 2019: 5). Many exceptional cultural heritage sites and artefacts have been destroyed and severely damaged in the process. Such destruction includes the violent destruction of the National Museum (Kabul) during the civil war period

(1989-2001) caused directly by rocket hits and looting as “...the catastrophe of war annihilated seventy years of our hard work and accomplishments...” (Feroozi et al., 2004: 1). The museum, founded in 1931, was once “...one of the world’s most opulent depositories of ancient art...” (Dupree, 2002: 983), presenting a 10,000-year historic span from the prehistoric to the 20th century. Sadly 75% of the archaeological artefacts were removed from the museum by looting or simply stolen as clandestine looting activities rose within the country alongside political disintegration (Feroozi et al., 2004: 1). Looted items from heritage sites across the country were commonly transported through to Pakistan before reportedly travelling to markets in Japan, England, France and the U.S.A, among other locations (ibid: 2)¹⁹. Among other countless tragic losses of cultural heritage are the Gandahara Tepe Shutur-e-Hadda Buddhist Temple and The Minaret of Chakari, both important monuments and prime artistic and architectural examples in their own right, vestiges of the country’s historical and religious legacy (Feroozi et al., 2004: 2). Under the Taliban’s governance heritage was widely protected in the early years with the control of looting, which reported to have declined during their governance and with the armed protection of heritage sites (Meharry, 2011; Falser, 2009). Their leader, Mullah Mohammad Omar, made several decrees when in power concerning the protection of heritage, significantly Decree B (1999) which explicitly states that the Bamiyan Buddhas will be protected as valuable assets to the country and a source of income from foreign visitors (Falser, 2009: 159). However, the decree was scrapped for another in 2001 which claimed that under *fatwa* (religious edict), all religious icons will be torn down:

On the basis of consultations between the religious leaders of the Islamic Emirate of Afghanistan, religious judgments of the ulema and rulings of the Supreme Court of the Islamic Emirate of Afghanistan, all statues and non-Islamic shrines located in different parts of the Islamic Emirate of Afghanistan must be destroyed. These statues have been and remain shrines of unbelievers and these unbelievers continue to worship and respect them. God almighty is the only real shrine and all fake idols must be destroyed. (Morgan 2012: 15; Flood 2002: 655)

When inspecting the international affairs of Afghanistan, this change of direction coincides with a harshening of sanctions against Afghanistan by the US in 2001, as their destruction

¹⁹ One of the most notable cases is the looting of a staggering 200 kilograms of silver and gold artefacts from the site of Mir Zaka, believed to be “...the largest ancient coin deposit in the history of humanity...” (Dupree, 2002: 985).

enters the domain of political blackmail and leverage (rather than religiously motivated) (Chiovenda, 2014: 419; Falser, 2009).

When the giant Bamiyan Buddhas were destroyed by the Taliban in 2001, it hit the headlines of international media²⁷. The images of 1,500 years of History being blown up into smoke and debris became the global face of the war against terror in Afghanistan. It became a globalised show as the Taliban arranged for al-Jazira to film the final explosion and collapse, which was televised worldwide (Centlivres, 2008: 3). All stages of their destruction were internationally announced via media channels before finally being razed in front of al-Jazira media. The performative nature of their destruction is something which is accentuated by Falser by claiming that their destruction was above all else “the first large scale live-act of performative iconoclasm against the physical and mental image of heritage in the age of the internet” (2009: 157). To this day the destruction is immortalised and archived in open access online platforms such as YouTube. The material destruction of the stone statues carries a message understood internationally beyond the borders of Afghanistan. As stated by the leader of the Taliban (Mullah Omar), a command was issued in 2001 for the destruction and eradication of all non-Islamic statues within Afghanistan (Centlivres, 2008: 2; Sabahuddin 2008: 29). The statues represented the diverse history of the geography, with a historic religious connection. This reiterates the importance of heritage and its complex connection to identity and memory as heritage should not be viewed as isolated remnants of a distant past. They were physically erased as part of IS’ systematic cultural cleansing, which included the obliteration of certain minority cultural histories and their heritages (Meskell, 2002: 557), and in this context the Hazar Shia Muslim community of Afghanistan²⁸ (Centlivres, 2008: 7). Although the Hazar community of Bamiyan are not part of the Buddhist faith, the monumental Buddhas are considered by them to be part of their cultural heritage (Marie, 2013: 95). All things considered, the destruction of the two monuments should be understood as “cultural vandalism and psychological warfare” (Marie, 2013: 95)

²⁰ Mead, Rebecca “Buddhas for Bamiyan”, 2001, *The New Yorker*
<https://www.newyorker.com/magazine/2001/10/29/buddhas-for-bamiyan>
[Last accessed 10 July 2020].

²⁸ For the Hazar community of Afghanistan, concentrated around the central mountainous region, the Bamiyan Buddhas represented “the ancestors of the indigenous population” (Centlivros, 2008: 7).

within wider ethnic and political dimensions as part of targeted attacks against minority groups by the Taliban (Marie, 2013: 95). The destruction of the Bamiyan Buddhas is a complex topic to be further unpacked with a consideration of all the (international) political, historical and warfare dimensions, most of which I will be unable to discuss within the scope of this dissertation. As discussed within chapter three of the dissertation, iconoclasm as a motivation itself is complex and ambiguous to a certain degree²⁹; while sometimes it's a targeted attack against a larger issue symbolised within a material object, at other times it can be categorised as nothing more than a personal display of power. The case of the Bamiyan Buddhas can be understood as an iconoclasm motivated by ideology within the political context of the wider warfare of IS. The significance of the two monumental Buddhas of Bamiyan is their importance as religious sites and historical sites, understood as “the location, placement, investment in physical or material terms of religious attachments and feelings” (Hay, 2006: 450). Therefore, not only did the destruction of the monuments aim to eradicate part of a history which didn't fit into the ideology of IS as pre-Islamic monuments, but it was also a provocation and public display of power — a thousand years of history reduced to rubble in mere minutes. Monuments can be defined as material-symbolic structures within the landscape, locations where meaning is ascribed can be “used, reworked and reinterpreted in ways that are different from, or indeed contradictory to, the intentions of those who had them installed” (Hay et al., 2004: 204).

Their destruction has been considered as to be “... pointing like a beacon at the various risks and threats with which our cultural heritage is faced...” (Pretzet, 2009: 46), a warning sign of the fate of heritage in contemporary conflict zones. To understand the implications of the destruction and possibility of a permanent reproduction, it is crucial to underline what the statues represent. The polysemic nature of heritage is highlighted by discourses surrounding social memory; the physicality of religious monuments and icons, such as the Bamiyan Buddhas, can be the foci of traditions and the memory of events (Peleggi, 2012: 56), as explored by works by Halbwachs, Nora, Connerton. By this we can understand that the cultural site extends beyond its material substance to cultural and social consciousness as heritage situates the past within the present. Within the understanding of semiotics (the underlying and meaning and significances given to objects) monuments can “frame and

²⁹ See Freedberg and Latour in Chapter 3 regarding the complexity of the topic of iconoclasm.

shape the content of what is remembered” (Kattago, 2015: 7). Rather than being an empty object, it is imbued with meaning by cultures as it enters the historical and memory narrative, however micro. Considering heritage from the ‘bottom up’ is helpful here by considering what heritage means to the culture and society, rather than from the state level. They are objects within the landscape that cultures attach meaning to beyond their physicality, as “We establish a sense of belonging to a community and to a place through cultural practices that create this sense of locality” (Rodney, 2010: 243), with the object at the centre, be it a church or a city square. Heritage can therefore “anchor a community’s identity in space and make possible its perpetuation across time” (ibid: 56).

However, when addressing Bamiyan Buddhas, there are concerns about the understanding of their destruction within the circles of Western academia and media, whereby the complex web behind its destruction is lost (Bernbach, 2013: 530). The ‘bottom up’ approach is neglected, so to say. An apparent ‘lack of concern’ felt within the West regarding the political leadup to their demolition, is likened by Bernbach to what Said and others termed as Orientalism; there is an apparent dichotomy between the East and the West, where the West is understood within this power structure as a form of the ‘Self’ which is “universalized through institutions such as UNESCO” (ibid). Culture is used as a tactic of division, rarely, if ever, as cohesion, particularly within the media according to Paul Gilroy (2004). Gilroy unpacks racism and its cultural impact, stressing that racist and ethnicity-based thinking thrives because of the value of the traditional community, groundedness and rootedness (2000). He effectively calls for the end of the raciology system under the fact that humankind is itself one race. However, with the ever-globalised world system within which such values are located, race is forever being used: whether as a niche marketing area, a commodification of cultures or “as a source of identity pride, especially... for the marginalised and unprivileged” (During, 2005: 167).

Accordingly, Othering takes the form of inequality within society as the post-colonial effects are lived by a large proportion of society as being labelled and categorised by race and ethnicity. Consequently, understanding the destruction of the Bamiyan Buddhas as purely reactionary to the West and the authority of UNESCO is colonialist and short-sighted. Instead, discourses need to be started from the basis of Afghanistan, the Taliban and

Buddhism, to be able to tackle the complexities of motivations and impacts of such a devastating action.



Figure 3.2 – The digital reproduction of the Western Bamiyan Buddha using light projection. AJ+, YouTube <https://youtu.be/FmDKHbv-ubi?t=2> (accessed May 2023).

Despite the demolishment of the Bamiyan Buddhas, thanks to photogrammetry, they are preserved as 3D digital models—from which it is possible to recreate them. Although they have been physically destroyed, there are limitless possibilities offered by digital technology to preserve them as 3D simulations as well as recreating them in numerous forms. Not only do the new digital methods of preservation allow for their recreation, but also for their detailed study and distribution, as access to them is democratised. They are now available to

view within the context of the museum²³ and online platforms as 3D models. However, as of yet, they have not been made accessible to the general public, throwing into question the democracy of art. The prohibition of access to heritage and art, whether due to a paywall or permission can be considered a new form of privatisation, following on from exclusive collections of the 19th century. Following their destruction, they took on a new life, one where those who had never heard of them before were devastated at the loss of cultural heritage to iconoclasm; mass circulations of images of the western and eastern Bamiyan Buddhas appeared online and across newspapers, as a loss of our universal history. Moreover, the western Buddha (standing at 53 meters, or 174 feet) was given a new (im)materiality 14 years after its destruction as a holographic copy, projected into the niche where it used to stand, transforming the nature of the statue. The hologram was a 1:1 reproduction of the original form, recreating the world's largest Buddha at the time of its destruction. The reproduction was made possible by the two Chinese documentary makers Janson Yu and Liyan Hu, using images collected of the statue to create a digital reconstruction (Petzet 2009: 46). The new life of the Bamiyan Buddhas' has been analysed by Bernbach, who claims that precisely through its destruction (or what he terms de-heritagization), "a specific aesthetic discourse develops" (2013: 535), reflecting their new identity as obliterated heritage; Bernbach highlights the superlatives which appear when describing the Buddhas within academia²⁴, something which is lacking pre-destruction (2013: 535). This indicates how heritage can change in importance and audiences, signifying its transformative power according to the socio-cultural context.

The method of recreation plays a large part in the identity, and consequently an understanding of cultural heritage objects. This is because certain methodologies may inadvertently end up erasing part of the object's identity, as discussed below. In terms of the Bamiyan Buddhas, the positives and risks of material reconstructive methods have to be analysed, each with their drawbacks and benefits. One project developed uses the methodology of photogrammetry (the collection of images of the site which are then mapped

²³ A digital copy of them are currently on display at the Imperial War Museum in London within the context of the international exhibition "Culture Under Attack", alongside the Lion of Mosul and the Triumphal Arch of Palmyra.

²⁴ For instance Danziger, N. "Massacre of a culture", *The Times* March 7, 2001; and Morgan (2012: 4).

with data to create an accurate 3D digital representation), which would allow for the retention of its state before its final destruction, including its signs of erosion and inflicted damage (Jang et al., 2019: 59). Alternatively, the proposal of a holographic laser model reproduction of both statues in situ in their original niches has been proposed by the Japanese government and Ministry of Information and Culture in Afghanistan (Jang et al., 2019: 60). Another proposal offered is by ICOMOS with the option of anastylosis²⁵ offered to “preserve all traces of history, including the memory of the destruction in 2001, seemed almost self-evident” (Petzet, 2010: 51). Anastylosis is a rebuilding method whereby the original materials are used by refitting them together, even if it is incomplete in comparison to its previous state. Each recreation methodology is concerned with the faithful reproduction of the original with the heritage’s life history truthfully portrayed, or what Benjamin would term *aura*. This means that the recreation of the Bamiyan Buddhas does not exclude its demolition from its identity, while arguably containing its *aura* as the original statue, by either being composed of the materials it was first constructed with or projecting a detailed rendition before its destruction. Consequently, the question is raised whether a rebuilding of the Buddhas by other methodologies would erase its own original identity, in which their destruction is part of? In other words: should a reproduction of the Bamiyan Buddhas erase their own destruction? It can be said that the restoration of heritage is, to a certain degree, erasing part of its history. Turning to studies within anthropology, the notion of the social biographies of objects is important to consider in here in relation to the reconstruction of heritage post destruction. As articulated by critical thinkers such as Arjun Appadurai (1986), each object has a unique biography and agency, which impacts its form and historical understanding. Taking the west Bamiyan Buddha as an example, the statue has faced targeted attacks as well as natural ageing processes which has transformed its appearance over time, and a step further away from its original appearance. Therefore, several questions emerge when considering the restoration of the western Buddha, most notably for us perhaps is to what extent it should be restored back to its original appearance when it was first built. By restoring it to its original form, centuries of its history would be laid aside to be replaced by a statue with new features (legs and arms) that had been destroyed in its life history, and thus running the risk of wiping from memory its visible biography. Therefore, iconoclasm

²⁵ Commonly used with archaeology and the reconstruction of heritage site and monuments to provide an ‘authentic’ rendering of how it used to be.

plays a central and defining part of the Bamiyan Buddhas' identity and *aura*, which if overlooked, risks ignoring an important part of its identity and meaning. Considering the perspective offered by the social biographies of objects, a partial restoration and a complete recreation of a damaged artefact significantly alters its history. A reproduction of the Bamiyan Buddhas would essentially erase the material destruction of them, and the wider acts of ethnic and religious cleansing by the Taliban.

3.2 From Destruction to Exhibit: The Lion of Mosul



Figure 3.3 – The colossal lion from Nimrud, Iraq, (865BC-860BC) unknown artist, gypsum, 2.59 metres x 3.96 metres. From the British Museum https://www.britishmuseum.org/collection/object/W_1851-0902-505.

The Lion of Mosul is a 3,000 year old statue originally located at the impressive Temple of Ishtar within the ancient Assyrian city of Nimrud, once a major city of the Assyrian civilisation built in the 13th century B.C. Located today within the northern regions of Iraq, Nimrud is a significant cultural heritage site with numerous impressive and irreplaceable features, many of which were destroyed by IS, such as the 140 foot tall ziggurat (a step-

pyramid religious structure found across ancient Assyrian cities). The site was filmed as it was bulldozed by IS forces in 2015 under the pretext that the statues were adulterous and blasphemous remnants of a civilisation that did not worship Allah. In 2015, as part of their propaganda campaign, IS released footage from Iraq of their destruction of the Lion of Mosul amongst numerous other artefacts, from within the Mosul Museum, Baghdad, and at the ancient site of Nimrud. Importantly it soon transpired that the damage within Mosul Museum was sustained mainly by plaster copies of original statues and ornaments held for exhibition, raising questions of IS' motives. The destruction was video-broadcasted via IS' website, which rapidly spread across the internet and reached international media sites and publications. The video shows the destruction of Iraq's heritage using sledgehammers and jackhammers in an attempt to erase the presence of the many statues and relics from Iraq's pre-Islamic past. However, the crucial point that IS Knowingly destroying 'fakes' or copies of original pieces of heritage indicates something beyond war crimes and the cleansing of 'pagan' beliefs; for IS they are promotion tactics while simultaneously financing the state (Fredricks, 2018: 537). As Atwan points out, IS only destroys heritage and sites once they have looted all removable artefacts of value for sale on the black market to fund their campaign (2015: 147). This draws on the crucial fact that "Cultural artefacts are the second largest source of revenue for IS after oil. Compared to oil however, artefacts are easier to loot (Hartnell and Wahab, 2015) as "World heritage is stored credit and the gold standard is the UNESCO inscribed list" (Fredricks, 2018: 537) with heritage becoming a form of income and currency and becoming an economic entity. Having hit international headlines, efforts were put into the preservation of the original artefacts within the museum's collection which were damaged. Several of the pieces destroyed in the attack have been digitally reproduced and some even materially reconstructed using 3D printing, including the statue known as the Lion of Mosul, which was recreated using 3D printing technologies facilitated by Google and Rekrei²⁶. In 2019, a replica of the Lion of Mosul stood within the Imperial War Museum of London (IWM) alongside other cultural heritage artefacts affected by war, providing them with a platform to be viewed, often post-destruction as reproduced artefacts. The power and importance of heritage is addressed by the curator of the IWM, Paris Agar, who states how "The destruction of culture is sort of an accepted side-line to war," and that "One of the main

²⁶ More information about Rekrei can be found at their website <https://rekrei.org/about> [Last accessed January 19, 2023].

reason for destroying culture is to send a message: We have victory over you. We have power over you. It's because culture means so much to us; if we didn't care it wouldn't be a tool"²⁷, reiterating the connection between war and iconoclasm as heritage is used as a means to destabilise cultures.

Considering the transformation and transportation of the reproduction of the statue, the theory of iconoclasm is beneficial for further understanding its implications and benefits. Not only does iconoclasm offer a perspective of art and heritage within conflicts but it also allows for alternative perspectives beyond the Western narrative of iconoclasm. This is possible due to the departure from the link between image worship and destruction that is so dominant in Western iconoclast theory. When IS destroyed the original stone statue, along with numerous other originals and copies²⁸, it was intended to make a political and ideological statement and impact global communities; however, it was not considered that a duplicate would be produced, giving it new meaning as an object of cultural heritage. Out of its destruction, the statue entered again the context of the museum, however this time as the status of a product of war (and triumph over iconoclasm). The object's historical meaning was put aside, in place of the wonder of technology at the feat of its reproduction post destruction — a force against terrorism and the destruction of heritage. Therefore, iconoclasm highlighted the statue as being an important piece of cultural heritage which led to its destruction and as a copy extended its meaning and symbolic status within history. Therefore, 3D printing technologies offers a unique possibility for heritage to be hyper-realistically reproduced in order to replace the original as a historical object. Unlike the western Bamiyan Buddha, the Lion of Mosul is not considered a religious icon, but rather a unique part of the narrative of the Assyrian culture of Mesopotamia. Moreover, not only was the Lion of Mosul 3D printed and exhibited both in Iraq at the museum of Mosul and London, but it is also available online within *Google Arts & Culture*²⁹, with a brief historical account of the statue, its destruction and recreation as well as the feature of being able to virtually walk around the Museum of

²⁷ Tia Vialva, "3000 Lion of Mosul Statue Bought Back to Life with 3D Printing", *3D Printing Industry*, 2019, July 9. Retrieved from <https://3dprintingindustry.com/news/3000-year-old-lion-of-mosul-statue-brought-back-to-life-with-3d-printing-158344/> [Last accessed January 19, 2023].

²⁸ After the release of the video showing IS members smashing contents of the Mosul Museum, it was revealed that many of those destroyed were plaster copies of original statues (Brusasco, 2016).

²⁹ The *Google Arts & Culture* page on the Lion of Mosul is available here <https://artsandculture.google.com/exhibit/ewKCr9cdkjpBIQ> [last accessed January 3, 2023].

Mosul to view the collection. Therefore heritage is democratised by being uploaded onto the internet as hyper-real experiences, increasing access to heritage by opening it up to marginalised groups who may not engage with them (Nancarrow, 2016: 75). Not only is it possible to experience the museum from your own home, but artefacts which have been damaged and destroyed are viewable within the online simulation — offering an enhanced experience of the museum's collection. Considering the contributions by Mirzoeff it is crucial to consider further the idea the display of heritage and heritage intuitions online. Drawing specifically on the point that heritage is reconstructed and displayed online after it has been physically destroyed in the processes of war refers to how conflict and destruction are mediated by online platforms. This directly applies to what Mirzoeff addresses as the sense of locality of conflict as it is watched and observed from across the globe via online platforms. The collateral damage of heritage destruction becomes another face of war which is interacted with and viewed by international audiences, removed from the contexts their destruction. However, despite the apparent uniqueness and possibilities of the simulation, there are concerns expressed regarding the intersection between heritage and Google. While Google facilitates the experience, the fact that much of the collection is digitally owned and copyrighted by the private company of Google raises concerns. When considering that some of the original artefacts are no longer accessible due to destruction, these digital copies have a lot of value. Therefore, it can be understood as a counter to democratisation, whereby although they are presented as accessible to the general public for anyone who has an interest in them, the communities where the artefacts originated from no longer possess the value of their lost heritage. Instead, they exist within Google's terms and format online, whereby they have full ownership of a cultural history and identity with which they can do anything.

3.3 *Aura* and 3D Reconstruction

Having considered the destruction of the two heritage artefacts at the hands of iconoclasm, a discussion on the significance of their reconstruction will be provided. When considering the impact of technological reproductions in relation to the Bamiyan Buddha and the Lion of Mosul, a central focus is that of authenticity. To reproduce them implies a reproduction which establishes to replace the original's role and symbolism, however there are uncertainties as to whether this is achievable. Firstly, is the discussion surrounding the

dichotomy between the materiality of heritage and the immateriality of digital representations in relation to authenticity. The value of the materiality above the digital (and intangible) is expressed by many academics and theorists over the centuries, especially Walter Benjamin and Baudrillard who view technological reproductions and copies as detrimental to the ‘authentic’ artefact. Baudrillard considers how the real can be overridden by the reproduction that is inauthentic, in part because it lacks context when standing in for the real (1995). He argues that this is particularly the case with the media representation of the Gulf War as the audience is that told they are watching real events but are in fact watching informational segments catered for them through a selection process. This essentially bears the reproduction as incomparable to the original (authentic) due to the manipulation of the material object. Therefore, arguably, the method used to recreate the Bamiyan Buddha resulted in a loss of its authenticity (and is therefore subordinate), as well as its position as an icon, as it has entered the dilemma of simulacra: since the reproduction is a 1:1 copy that has been lifted from the original, is it the original or not? (Baudrillard, 1993). When picked apart, this addition to the topic of the reproduction of destroyed cultural heritage lies at the heart of the discourse. Whether an imitation, with the purpose of being an exact imitation (rather than an interpretation or inspiration, let’s say) can be considered the same as the original, i.e. whether the reproduction is authentic.

Reflecting on Walter Benjamin’s theory of the *aura* (1935), which by definition is based on materiality and the historical, social and individual life story of the object, the nature of authenticity is brought to the fore. Considering here the recreation of the western Bamiyan Buddha into a transitory projection of light, questions come to mind as to whether this creates the same *impact* as its ‘original’ material form — a whole other topic outside the scope of my work. Benjamin considered the reproduction, in part, as an aestheticization as the artwork is reproduced without its previous social functions with “the liquidation of the traditional value of the cultural heritage” (Benjamin, 1936: 4), due to being removed from its traditional significance. Another effect discussed by Benjamin is that by removing the *aura* the statue can take on a new political dimension, as it enters capitalist consumption, as a kind of democratised form of art. Instead of the classical ‘top down’ cultural approach of High Art held by his contemporaries at the Frankfurt School, Benjamin was hopeful for an art form for the masses — a popular art — that is available to all and whose worth is decided by

popular opinion. This democratisation of art and heritage can be understood as an “intrusion of issues of representation into the politics of daily life” (Peim, 2007: 369), as ‘The Work of Art in the Age of Mechanical Reproduction’ brings questions to the fore regarding representation and the politics of art. When considering the Bamiyan Buddha’s we can see that in some terms it has become political as it enters the mass media as images of its destruction are plastered across newspapers and reports, entering the daily lives of millions from afar.

Taking Benjamin’s *aura* as a springboard, you can consider the question of authenticity from the position of the statue’s biography. Arguably, the history that the statue has lived gives it its particularity that makes it authentic and one-of-a-kind: its attrition, its location and crucially how it has been destroyed. This renders any reproduction inauthentic simply because its destruction became such a large part of the original’s identity (as noted above in relation to its televisionization).

Departing from Baudrillard and Benjamin, many theorists have tackled the question of the material and digital. There exists a longstanding dichotomy between material heritage and digital heritage, whereby the material is generally valued above the digital. This preference of the material has been challenged, such as by Fiona Cameron: “Digital objects, their value, meaning, and presence, have been informed by these conventions and subsequently judged from the standpoint of the “superior” physical counterpart” (2007: 49). However it has been suggested by Fyfe that the (specifically West’s) dichotomy between copies and originals is a social construct by drawing on the comparison between the impact of the shift technological from engraving to photography, with that of the development of the digital. Consequently:

The west’s culture of copies, with its strong classification between originals and reproductions, is a particular social construction of our embodiment in the sense that it presupposes a mimetic faculty that will be transformed and channelled as a determinate culture of things. Our antinomian thinking in terms of ‘originals’ and ‘reproductions’ is merely one possible realization of a human capacity to imitate which is always transformed into a habitus or second nature. We might usefully place the story of English engravers in the context of the sociology of mimesis and of modernity’s regulation of mimetic powers. (Fyfe, 2004: 63)

Similarly to digital images and models, photography was viewed as undermining art and authenticity, before being accepted by the museum as displayable art. Furthermore, social construction of the material/ digital dichotomy can be understood in terms of the meanings artefacts are attributed with:

The “real” object’s enchantment, its aura, for example, is its physical presence, but most important, it derives from ascribed social meanings. Its message-bearing abilities and the persuasiveness of its origin through associated stories are important ingredients in invoking its awe..... If an object is dislocated from its systems of meaning its aura is diminished (Cameron, 2004: 57).

This is something that directs us back to Benjamin through the idea of the reproduced artwork as something symbolic, a representation that the viewer considers in their own terms. However, discussions surrounding the symbolic power of art extend far beyond Benjamin, to authors specifically concerned with the entity that carries and produces meaning (the signifier) and the meaning itself (the signified). Such scholarly discussions can be categorised under semiotics: “the theoretical possibility and the social function of a unified approach every phenomenon of signification and/ or communication” (Eco, 1979: 3). Theorists such as Ferdinand de Saussure, an early scholar of semiology, investigated how “systems of elements mutually correlated one or more codes” (Eco, 1979: 3) of a sign, derived from signifiers from language to architecture (e.g. the cross is deeply coded with Christian values as it is attributed with learned cultural ideas). Therefore, when applied to visual culture, semiotics can (hopefully!) help us to gain information about the signified by looking at the sign. Such arguments reflect the value and meaning of material objects, which are crucially informed by the contextual importance we provide them. That is to say that within society they become symbolic. This is something which was also expressed by the social anthropologist Handler, who, within the argument of materialism and the importance of heritage, posits that the value of artefacts is relative; objects have no intrinsic value but are rather imbued with meaning by particular social concepts with which we encounter them (1992). This further resonates with memory studies, in specific the work of Pierre Nora’s *lieu de mémoire (site of memory)*; a community may attribute symbolic elements to an entity (material or non-material), which then become part of their “memorial heritage” (Nora, 1996: xvii). This idea has received critique by scholars, such as Dacia Viejo-Rose, who highlights that “memory and heritage are not synonymous” (2015: 6), instead it can be

understood as a “translation of memory” onto the surrounding environment. Crucially Viejo-Rose highlights the heritage’s political side: “the editing out of the past, deliberately choosing to remember certain events” (ibid), something that is worth further reflection in relation to digital reproduction post destruction. The distinction between collective and individual memory is also up for question as the very nature of memory is contentious as it frequently crosses the line into imagination (Barash, 2011). Therefore the argument is made that the significance of heritage is formed by the importance we provide it, as a memory site and an integral aspect of social cohesion and identity. This means that the Bamiyan Buddha is viewed as more than just an object, but is actually culturally marked with an identity which changes over time and space, enriching it with a biography, according to the social biography viewpoint (Kopytoff, 1986: 64). It also means that it is subject to politicisation and falsehoods as it is held in the global audience’s memory, shaping their understanding of the present.

However, it appears to be more complex than this as the digital copy theoretically has the potential of having as much value as the original material form, given the attribution of meaning to objects. It can be seen that “the virtual rather than simply being a mimetic mirror of reality, redefines it” as interpreted by Maria Roussou in relation to facsimiles (2008: 231), highlighting the issue of authenticity. The importance attributed to the material original suggests that within their specific and complex cultural context, the Bamiyan Buddhas were imbued with an exceptional value which is not replicable. Such a stance is suggested by the continuing debates which are still going on today about whether the Buddhas should be recreated or not (Janowski, 2016; Quagliaroli, 2005). Moreover, the status of the reproduction of the Bamiyan Buddha can be understood as fragile as “the reproduced image is vulnerable to the charge that a complete meaning is absent or that the original meaning is subverted” (Fyfe, 2004: 51), from the perspective of a materialist focus. While the value and meaning of the Bamiyan Buddhas are based on materiality, the holographic reproduction is subordinate, being unable to perform the same iconic function as the original statue. However, the holographic reproduction of the western Bamiyan Buddha arguably does not attempt to replace the original, as it was temporarily displayed within its original niche. The loss of the *aura* through technological recreation falls short of recreating the *full* significance of the statue. Rather it can be said that the hologram creates a different or new

category of the specific cultural monument, giving it a new meaning and international identity as a display of homage to the original and a mourning of its loss.

Considering Benjamin's *aura* within the 21st century's context of digital technologies should be addressed with a critical analysis. It is crucial to remember the point in history within which he is writing and the assumption that art is a stable, objective category. Within the contemporary context of the digital, Benjamin's work on the *aura* can be supplemented by technological advancements as time pushes our understanding of *aura* forwards. Conversely to Benjamin's materialist based argument, it can be said that "the value of the 'real' increases when digitized, enhancing its social, historical, and aesthetic importance, owing to the resources required in the compilation of a 3D rendering, and through distribution" (Cameron, 2007: 57). This is something which sharply counters Benjamin's argument, whereby even digital copies and global circulations of paintings increase the cultural value of the original — or at least does not decrease it — when considering the throngs of tourists vying to peek at the Leonardo da Vinci's Mona Lisa (1503) within the Louvre, Paris (despite its uncountable reproductions as tourist memorabilia and within popular culture). According to Roussou, in some cases reproductions have therefore *increased* the aura as opposed to diminishing it: "thanks to its virtual replicas, the aura of the authentic is amplified, while the fake may appear more authentic" (2008: 271).

It appears that while the reproduction of heritage itself is harmless, when we are faced with a copy that states itself to be the original after destruction different dimensions are introduced into the argument, as indicated by Baudrillard. When considering the examples of the reproduction of heritage that have been wilfully destroyed or damaged, it is important to examine past the face-value benefits offered. This means critically asking: 'what are these cutting-edge technologies and reproductions of heritage, i.e. who is creating them and why?'. While to be able to access and view heritage in novel ways (be it online or to be able to interact with a striking duplicate), issues arise concerning the importance of the 'original' artefact after it has been deliberately attacked. In no way do these criticisms outright protest the recreation of heritage in its many forms, but rather it offers a tentative indication in the direction of what it means to be able to not only replicate heritage, but also replace it. It is crucial to draw from the foundations of Cultural Studies by observing the ethics that are

brought into the picture concerning how and why heritage is reproduced post destruction, as lines are easily transgressed.

Within the scope of the implications of cultural heritage within conflict it provides testament to the devastating destruction and obliteration of histories, and also their recreation. Post-conflict reproductions offer to take a stand against their ruins, each in their own way. The crucial intersection between archaeology and digital technologies has opened the gate for impressive reproductions with many further possibilities of recreation, transportation and interaction. Therefore, the destruction of cultural heritage in some cases may be thwarted to some extent; these two cases are exemplary of the possibilities ahead for the preservation of material culture. Although there are several drawbacks to the digitally facilitated reproductions of heritage, there are many gains experienced in its rebuilding, including in these cases the resistance against terrorism and cultural/ ethnic cleansing.

CHAPTER 4

CONSIDERING THE EFFECTS OF 3D PRINTING ON HERITAGE: THE PALMYRA TRIUMPHAL ARCH

The experience of heritage has been enhanced in recent years due to ground-breaking technological advancements which enable a new understanding and engagement. The advent of 3D printing technologies has enabled a global revival of cultural heritage through the digital processing of images (photogrammetry) and 3D scanning. Photogrammetry is the process of collecting images of an artefact which enables the production of a 3D digital model through a superimposition of images to calculate their 3D location within space³⁰. The most famous example is that of the recreation of the Palmyra Triumphal Arch which was 3D printed after its destruction in 2015 after it was blown up by IS during their occupation of the historical site, restoring the copy to its original state before being damaged. Therefore, the capabilities of digital technologies allow for a revival of destroyed material culture, although questions are raised as to the ‘authenticity’ of the copy and the context within which it is displayed and utilised. Therefore, I shall be addressing the destruction and subsequent reconstruction of the Triumphal Arch of Palmyra to untangle the countless benefits as well as controversies of its reproduction. This will be carried out in connection with the importance of the cultural and historical contexts of the object; its role in building cultural representations; notions of ownership and digital heritage; and finally, the concept of reality/ hyperreality as posited by Baudrillard, specifically concerning *simulacra*.

³⁰ For further information on 3D digital modelling and printing visit <http://patrimoni.gencat.cat/en/stories/cultural-heritage-3d> [Last accessed January 10, 2023].



Figure 4.1 – The Triumphal Arch of Palmyra, Syria, before its destruction. Wikimedia Commons https://commons.wikimedia.org/wiki/File:Palmyra_-_Monumental_Arch.jpg



Figure 4.2 – The 3D printed replica of the Triumphal Arch of Palmyra, Trafalgar Square, 2016. Guardian Culture, YouTube https://youtu.be/bq4_-iBCqp8?t=289

The Triumphal Arch of Palmyra, located within the region of Homs in Western Syria, is situated within the ancient Roman city of Palmyra. The marble Palmyra Triumph Arch, also known as the Arch of Septimius Severus, is located in the eastern section of the colonnade which extends for an astonishing 1.1km and was unfortunately destroyed by IS during their early occupation of the site in 2015. The ornamental Arch of Triumph boasts a height of 20 meters which dates back to the Roman reign of Septimius Severus in the 3rd century A.D. There are ambiguities around its reason for construction with some sources suggesting it was erected to commemorate the Roman victory over the Parthians. Also known by its Arabic name *Tadmor*, the city has an extended history from a 3rd Millennium B.C town to a flourishing Roman centre from the 1st century A.D, reaching its peak in the 3rd century AD³¹ (Stoneman, 1994: 17). At the time of the construction of the arch, Palmyra was what is termed a ‘caravan town’ within the desert where it thrived as a trading city as one of the many Roman settlements strategically situated on the Silk Road. Unfortunately, recently similarly to other cultural heritage sites within Syria, the ancient city of Palmyra has experienced severe damage due to military activity. The ancient city has suffered greatly during the ongoing conflicts within the region, owing to both its strategic geographical location and its historical importance³². The site was used by various military and armed forces with camps and barracks held within the ancient town throughout much of the war in Syria (Cunliffe, 2014). To situate the site within the context of the Syrian conflict, the ancient city of Palmyra was successively occupied and liberated; it was controlled by IS between May 2015 to March 2016 before being liberated by the Syrian Arab Army (SAA) and Russian forces before again being occupied by IS from December 2016 until March 2017 (Danti et al., 2017: 12). Today the site is liberated from IS under the control of the Syrian State and is undergoing restorative processes of major artefacts and structures, such as funerary busts (Kropp and Raja, 2014). The period between 2013 and 2014 saw the most

³¹ The earliest references of Palmyra are derived from cuneiform texts, the oldest dating back to 700 B.C to Sargon I of Assyria. The tablet indicates that Palmyra was not a flourishing city but rather a small town (Seyrig, 1950).

³² Other sites within the area of the ancient city receive extensive damage (less publicly) by IS with the wrecking of several tower tombs in the Valley of the Tombs on the outskirts of the site (Cunliffe, 2017: 13), with reports of military activities within the regions of Palmyra from as early as 2012 (Cunliffe, 2012: 38).

intensive destructive period for heritage, coinciding with the UNESCO World Heritage Site of Palmyra suffering its first injuries. Despite its destruction, facilitated by the technological advancements over the last decade, the Palmyra Arch was reproduced using a combination of photogrammetry and 3D printing techniques in. This was made possible through an international partnership between Dubai's Museum of the Future Foundation, The Institute of Digital Archaeology (IDA), UNESCO with the use of 3D printing technologies and the Million Image Database (MID) for the access of archival images of the arch. The reconstruction of the arch was viable due to the rich resources at hand, using a combination of 3D rendering from images collected in the MID. Due to the extended interest in the ancient city of Palmyra from the 17th c. onwards, there is an extensive archival database of detailed inscription and photographs collected over the centuries, making it an exceptional case. The revival of the Arch, despite the damage sustained to the original, exemplifies the positive impact digital technologies have on heritage. The arch made a grand tour across Europe, the U.S.A and Saudi Arabia, being first unveiled in Trafalgar Square, London in April 2016, before travelling to New York City for its installation in September 2016. In 2017 it since travelled to Dubai, and Italy at the G7 summit in Florence and Arona respectively³³. Most recently it has been on display at the National Mall, Washington D.C in September 2018, and in November 2018 a scale replica of the IDA's reproduction went on permanent display at London's Victoria & Albert Museum. The reproduction of the Arch was motivated as a stand against iconoclasm and the disastrous effects of IS on heritage sites, as articulated by the then Mayor of London Boris Johnson, by stating at the unveiling of the arch how it was a symbol "in defiance of the barbarians [IS]"³⁴ who seriously damaged the original structure. This sentiment is shared by many, including the former New York City Deputy Mayor Alicia Glen at the unveiling of the arch in New York, who saw it as "a symbol that we will not stand for acts of terrorists, we will not stand to have people murdered and thrown out of their countries"³⁵ as there appears a unified front against the destruction of heritage. This is

³³ For more information visit the IDA website <http://digitalarchaeology.org.uk/history-of-the-arch/> [last accessed January 28, 2023].

³⁴ Turner, Laura, *BBC*, "Palmyra's Arch of Triumph recreated in London" (April 19, 2016) <https://www.bbc.com/news/uk-36070721> [Last accessed January 28 2023].

³⁵Jalabi, Raya, *Guardian* "Replica of Syrian arch destroyed by Isis unveiled in New York City" (September 20, 2016) <https://www.theguardian.com/us-news/2016/sep/20/palmyra-arch-syria-new-york> [last accessed January 28 2023].

emphasised within the press³⁶ with headlines which highlight the solidarity felt against terrorism with titles such as “Palmyra's Arch of Triumph rises again in London's Trafalgar Square after being destroyed by Isil”³⁷ and “Ghost of Palmyra's arch rises in Trafalgar Square”³⁸, ramifying the symbolic importance of the copy of the arch. Considering the power of semantics in constructing our understanding of the world and the representation of cultures (Hall, 2003; Jovochelovitch, 2007), such language provides the Triumphal Arch with a new identity and meaning beyond its historical narrative. Its identity is now closely linked to its destruction and reconstruction and as a symbol of the devastating effects of war. This is mirrored by IDA, who consider the tour of the copy of the arch as

Sending a message of peace and hope, of demonstrating how new technologies can contribute to the process of restoration and reconstruction, and drawing attention to the importance of helping to protect and preserve the history and heritage of peoples under threat all over the world. IDA, “The History of The Triumphal Arch of Palmyra”

Not only is the 3D printed arch considered as a reaction to the destruction of heritage, but it also enables a wider engagement with heritage by reaching audiences which may not necessarily have been able to access it, adding to the educational value of digital reproductions. The fact that it toured across four countries further exemplifies its outreach as it was displayed outside of the museum context, such as in New York where it was displayed within Central Park, extending the audience beyond the museum-goer or those with interests in heritage. Cultural contact is mediated through the arch as audiences can closely engage with Roman Syrian heritage, something which was less accessible before its reproduction, especially after its destruction. While 3D printing has great potential to provide “multi-sensorial forms of experiencing culture [that] have a great benefit for the accessibility of cultural heritage, especially for persons with learning difficulties, for children, the elderly,

³⁶ A quick Google search reveals newspaper covering the reconstructed arch, including: Pantazi, Chloe, *The Business Insider*, “A 2,000-year-old monument destroyed by ISIS has been recreated in London” <https://www.businessinsider.com/london-replica-of-arch-of-triumph-in-palmyra-destroyed-by-isis-2016-4>; [Last accessed January 28, 2023].

³⁷ Danny Boyle “Palmyra's Arch of Triumph rises again in London's Trafalgar Square after being destroyed by Isil”, *Telegraph*, April 20, 2016 <https://www.telegraph.co.uk/news/2016/04/19/palmyras-arch-of-triumph-rises-again-in-londons-trafalgar-square/> [Last Accessed January 28, 2023].

³⁸ Edwin Heathcote, “Ghost of Palmyra’s arch rises in Trafalgar Square”, *The Financial Times*, April 16 2016 <https://www.ft.com/content/70a7d9fe-0545-11e6-a70d-4e39ac32c284> [Last accessed January 28, 2023].

for blind or visually impaired visitors” (Neumüller et al., 2014:119), the arch falls short. Access to the arch was reportedly restricted and guarded to prevent the touching and walking beneath it in both London and New York (Murawski, 2016; Voon, 2016).

Moreover, the possibility for a close attention to detail of the hyper-realistic copy — such as the exquisite details of the geometric relief motives — is lost. Rather than rendering the arch as an exact 1:1 copy, the 3-D printing technology did not facilitate a faithful replica with reports of several decorative features allows for expert analysis as a faithful reproduction. Consequently, through the use of 3D printing, the awareness of the loss of heritage within war zones is increased whilst simultaneously making a statement against iconoclasts.

4.1 Three-Dimensional Printing and the Jeopardy of Context

Arguably, all objects removed from their original location to a museum or installation are incomplete (Alberti, 2005). Objects become decontextualized within the museum regardless of the supporting information provided as it is removed from its original setting, as objects gather meaning through their interactions with people across time and space (Alberti, 2005: 559). This can be seen in the case of the Palmyra Arch, which as a reproduction toured around the world. As discussed above, the arch became a (Western) symbol of unity against terrorism and the wanton destruction of heritage. However, such a narrative arguably removes the devastating human loss of war in place of technological advances (Khunti, 2018: 3). This raises ethical questions about the use of heritage from war zones to promote messages as a single representation of a complex conflict. Consequently, despite the advantages brought about by 3D printing the arch, there are some criticisms concerning the decontextualization of the monument and its new status as a decontextualized exhibit. This effectively changes the nature of the monument as it balances on the line between art and heritage; i.e. is its primary function as a historical monument, significant due to its historical context, or is it purely aesthetic, existing to arouse reactions from the audience due to its very presence alone? Contextuality is crucial for an understanding of the remains of heritage extant today — what remains only reveals part of the narrative of its complete life history. The arch can be understood as being decontextualized according to several dimensions. Firstly from the rest of the historic site as it is isolated as a single artefact, devoiding it of its

wider significance and relation to the historic town of Palmyra; the specific geography and cultural background within which it existed; and finally historically, as information about its function and role is obstructed. Accordingly, context is crucial because “Without written notices to communicate the significance of the reconstructed arch as an “act of solidarity” and “defiance”, some of the public have misappropriated the reconstruction as a novelty attraction” (Khunti, 2018: 6), and so negating the very message it wishes to deliver. Therefore, despite the Arch being represented as symbolising the war against Syria as the Western world stands up to iconoclasm, it falls short of delivering the message³⁹. This is something which is further shared by Fredricks who considers Palmyra from a political perspective by stating that:

Palmyra demonstrates the constant political rewriting of history and historical sites. In claiming to preserve in the name of “common heritage” a token of shared “global” value these 3D approaches are exemplary of the aesthetics and politics of state sponsored vandalism and iconoclasm in the digital age.
(2018: 530)

By removing the arch from the ancient historic site of Palmyra, its value and use are transformed as it loses its original function and cultural use within an ancient Roman settlement. Instead, through its destruction, the arch moves beyond its intended function to become a global symbol of resistance to terrorism. Due to the restriction of space within the dissertation, this broad and complex topic will not be further unpacked, however it offers food for thought regarding the ethics and motivations which may manifest within heritage reproductions.

The important point to emphasise at this stage of the discussion is the lack of a contextual grounding of the arch as it is lifted into a new setting and cultural narrative. When the cultural and historical context of it is omitted the arch takes on a new meaning, suspended as an imitation of the original. Within the setting of the museum it crucial that information regarding the cultural artefact on display is provided for the audience, giving it meaning as well as providing the viewer with a framework. As stressed by the art historian and Emma

³⁹ For further information see Vaughan, Connell (2016), “Statecraft: Vandalism and Iconoclasm in the Digital Age”, *Proceedings of the European Society of Aesthetics*, Dorsch, Fabian and Ratiu Dan-Eugen (eds.), 8, pp. 527- 544. Retrieved from <http://www.eurosa.org/volumes/8/ESA-Proc-8-2016-Vaughan.pdf> [Last accessed January 28, 2023].

Barker, the act of isolating an object from its wider context results in a focus on the aesthetic appearance, above the function and role of the object (1999: 15). When information is omitted, then the meaning of the artefact is lost to the interpretation of the viewer, touching on theories of othering as understood by Said (1978).

Consequently, the arch should be informed with substantial contextual knowledge, enabling the audience to understand and place the arch within the cultural context from which it derived. Precisely because it is not displayed within the setting of a museum, the arch requires supplementary contextual information to allow the viewer to understand its construction, extended historical importance as well as its cultural meanings. Instead, the focus of the arch is on its destruction and reconstruction, stripping it of its meaning and identity. This can be understood as the arch becoming a shell of its former self as the meaning attributed to it across history was lost with the original. However, there are complexities to be considered, such as the selection of information regarding the arch. Certainly not all information can be included due to the practicalities of the display, however the context which was eventually selected has the effect of defining the monument as a political artefact. The importance of the monument as a piece of Syrian Roman history is transformed into a political relic of strength against terrorism across the world, as a statement against iconoclasm. The extended historical social memory of the monument is replaced by its recent destruction and consequent reconstruction which effectively removed part of its history and identity, something which has been further discussed by Malpas who suggests that

The instant access provided by digital media strips away these “conditioning” and “contextualizing” preconditions from the experience. They render the event of cultural heritage more sterile, more detached, and less engaging. The cultural experience must contend with other worldly contexts, such as being immersed in one’s own culture while learning about another’s, or being in no context at all, which competes for attention and is thus distracting, at the very least (2008: 15).

Although the author is speaking from the perspective of digital intangible media, it is applicable when considering the methodology of 3D printing heritage. The lack of a contextual setting may have the effect of suspending the cultural artefact outside of its meaning, both in terms of its historical function and as a *lieux de mémoire*. In sum, it can be argued that the arch became a tool for the representation of all cultural heritage which has been destroyed in the processes of war and iconoclasm. Therefore there are some

considerations which have to be made beyond the exterior of its reproductions, with further questions regarding why it was reproduced by looking at who is representing the piece of reproduced heritage.

4.2 Recreation and Implications for Cultural Representation

Therefore, having considered the importance of a context to situate heritage culturally and historically it is imperative to understand more holistically what the reproduced arch corresponds to. This means an investigation into several aspects beyond the technological advancements exhibited with the feat, to the social and cultural impact it may have. As previously explored within Chapter 3, material culture performs an important role in cultural representation along with language and imagery through which we make sense of the world (Jovochelovitch, 2007; Eco, 1979). This is something which is examined by Mirzoeff who brings to discussion the potential danger of heritage becoming highly politicised (2005; 2011). To paraphrase Mirzoeff, he considers the connection between digital media and the democratisation of truth by questioning whether we rely on a small number of forms and sources of information (2005), despite the array of resources we have at hand. Digital media is a means of representing a culture, mediated through images, televised images and online 3D reconstruction within both the physical and digital spheres. However, as alluded to by Mirzoeff, the cultural representation offered by the digital medium does not necessarily offer a full and informed understanding, despite technological advancements. When it comes to cultural representation, the ‘audience’ is an important feature, those who interpret and engage with the mediated culture. As highlighted by the author, despite the global reach of digital media, the importance of the local is never lost (2005: 3) — or what the French Sociologist Pierre Bourdieu termed *habitus* (1977; 1984) whereby the conditions of one’s environment, identity and class influences one’s understanding and engagement with the world around you; it is from specific geographical localities that a representation of the other is created, whether gathered from the media, contact with museums, the arts etc. Therefore, the 3D printing and subsequent international tour of the Triumphal Arch of Palmyra should not be considered in isolation, but rather as part of a larger system of representation. Considering the importance of historical and cultural contexts to inform the audience about the monument, to dislocate the narratives of the arch creates ethical questions about

reproduction. Reiterating the words of Stuart Hall, the symbolic role of heritage is crucial: “though strangers to one another, we form an “imagined community” because we share an *idea* of the nation state and what it stands for [through cultural heritage] ... identity thus depends on cultural heritage, which binds each member individually into the large national story” (Whose heritage, 1999: 24). However, the extent to which the recreated arch can recreate and symbolically form an ‘imagined community’ is up for question. Rather the arch has been considered as a commercial and political entity, argued by Vaughan that due to its reproduction and new status as an exhibit, is not a copy, but rather:

Its smaller scale (the original is 15 meters) and purpose mark it out as something much more explicitly commercially connected, politically instrumentalised and aesthetically complicated; a souvenir. This souvenir ought not to be considered a rescued treasure from an IS iconoclast bonfire of the vanities nor a potent text to be stored in a digital Giftschränk (poison cabinet) (2016: 528).

This can be further argued due to the lack of context present with the reproduction as it is empty of its cultural and historical significance or meaning. This effectively feeds into the argument that, as a souvenir, it is something purely aesthetic and a memento to be owned—usually associated with mass production (Steiner, 1995: 154). Rather than representing a united stand against terrorism, the arch can be understood as a commodification of heritage in the face of war, articulated by Fredricks with the understanding that “The new arch is an aesthetic response to IS within the global war between IS and its enemies” (2018: 532), from which we can easily insinuate that it is a frivolous response. In general, this is something that can be considered with all heritage facsimiles, alongside the issue that the cultural and historical importance of the original, is perhaps lost in the processes of decontextualization.

The role of digital technology and heritage can be further considered from another dimension, that of the use of digital media by IS. The media plays an important role in IS’ iconoclasm within Syria and elsewhere, as they utilised video channels to promote and provoke. Rather than only viewing digital technology as an enabler of heritage and culture, by discussing the abuses of it a more holistic study is possible. Firstly it should be noted that the Palmyra Arch was violently blown up in the global public eye as IS filmed and broadcasted the process. The Triumphant Arch was destroyed using

dynamite in October 2015 the destruction of which was first publicised and realised through Twitter, after which remote satellite images were used to confirm the images and the extent of the damage (Fredricks, 2018). With IS' involvement in looting and selling cultural heritage on the global black market, their use of social media and the digital was instrumental. For example, such public displays of the destruction of heritage "indirectly ensures that the icons they deface are often less likely to go extinct" (Fredricks, 2018: 529), ironically turning the tables on iconoclasm. Furthermore, in relation to the basic activity of looking and the visibility provided by social media and digital technologies, there are interesting considerations to contemplate regarding the power of being able to look. What is interesting to consider here is the question of what it means when that right is denied — when there is a power imbalance which removes the access to heritage; 'to look' then transcends the category of the everyday into a 'right' and something which must be fought for. Work done by Mirzoeff highlights such considerations. Although this is not the full story of the Palmyra Triumphal Arch because its final destination was the original site of Palmyra, it opens the floor for future discussions concerning the ethics of heritage reproduction post-destruction with its relocation.

Another important aspect to consider in regard to cultural representation and the Palmyra arch is connected to the lengthy discussions on colonialism and power imbalances. The politics of the recreation of the arch can be exemplified through the framework of colonialism whereby a power dynamic is insinuated through the West's recreation and display of Syrian heritage. As touched upon earlier within the dissertation within Chapter 2, the connection between heritage and politics with its use in the formation and legitimisation of the nation-state is paramount. Using Hall's analysis of the importance of the material culture and heritage, objects symbolise values which we learn through contact with the object (2000: 5). Therefore, the display of heritage builds cultural representations through material remains with the transferral of knowledge obtained from the object and its history. However the selection of the Palmyra Arch for international display is connected to larger problems about what is preserved and reproduced with questions of why particular objects are chosen. This is something shared by Carol Duncan, who reiterates the connection between heritage (within the museum setting) and the conforming and construction of identity (1995:

9). Such a position of authority over the representation of cultures through heritage can be understood in terms of power and post-colonialism as the acquisition and display of ‘other’ cultures is central. This is similar to what Fredricks articulates in relation to the reconstruction of the arch by voicing how “the ruin suggests the passage of empire and the controlling of ruins is a clear demonstration of power” (2018: 529), as the very possession of a reproduction of cultural heritage connotes a display of power. As articulated by de Cesari, not only are heritage and archaeology utilised for the display of power and politics (e.g. within the colonial museum setting of early ethnographic museums such as the Pitt Rivers, Oxford) but there is a history of state building within the Levant with a “political mobilisation of antiquities” (2015: 22). Such a ‘political mobilisation’ is highlighted with the figures of those such as the British spy and head of Syrian Antiquities, Gertrud Bell, as well as the archaeologist Laurence of Arabia who led the Arab Revolt (de Cesari, 2015: 24). This intimate connection between state politics and archaeology (albeit heritage) reveals how it may be utilised as a tool of power. Consequently, the contextual history of the geography is important for the narrative of the reproduction of the arch, with the backdrop of “Conflicting imperialisms and hegemonic regional projects, as well as the recent Wahhabization of Sunni Islam propelled by Saudi petrodollars” (Cockburn, 2015). Therefore, having acknowledged the complex history and politics of heritage within the Levant questions are provoked regarding the international backing of the reconstruction of the arch and its tour, as the war in Syria is aestheticised as a feat of technological advancement. It is vital to consider here the contributions made by Edward Said on power structures between cultures, and specifically the formation of the Other, as a reassessment of the visual impact is required. The Palmyra Triumphal Arch becomes an issue of cultural ownership and representation, where part of a complex cultural narrative is reduced to a spectacle of resistance and technological progression.

Consequently, by exploring what the 3D reproduction corresponds to theoretically and materially, it can be understood that there are significant power structures involved at many levels. By examining the various ways in which digital heritage is impacted by relations of power and considering some of the repercussions, it is possible to raise awareness of further ethical questions for the consideration of future projects. Notably, the power and authority

alone of possessing the digital replica of a cultural heritage site is significant because it may be legally owned by a company under copyright laws and even sold to other parties. Not only does this remove heritage from its original cultural setting, but it implies ownership based on digital legitimacy — those who have the technology have the means of owning cultural sites of other cultures. Such a possibility of possessing heritage artefact replicas after the original has been destroyed perhaps raises ethical questions surrounding the reproduction of heritage. The fact that heritage is widely accessible online as walk-through simulation sites on platforms such as *Google Arts & Culture* does not only democratise heritage, but it also removes it from its cultural and social origin. Moreover, this is exemplified with questions which arise with copyright issues, as legally companies own digital heritage sites. This can be understood within the terms of discussions asserted by Foucault and Hall, who both articulate negotiations of power within the cultural sphere.

While the reproduction of the Palmyra Arch benefits scholars and the public by introducing heritage in a novel way, there are some reservations about its ethics. By this, it is understood that the technological methodology of scanning and forming an online 3D model (which may also be downloaded) should be accessible to all. When access is restricted then questions of ownership arise and the nature of cultural heritage as it exists purely within the digital sphere to a select few. In other words, the possession of digital replicas under copyright introduces a new face to colonialism whereby cultural heritage is ‘owned’. In the case of the Palmyra Triumphant Arch, the IDA do not hold copyright on the digital model of the cultural site, however the copies are not available on the website for public access as of yet (2023). It is paramount that a distinction is provided for the reader here between the distribution of heritage for education through digital resources — such as Cyark’s archive and the online exhibit by Getty⁴⁰ — and the reproduction of the arch a substitute for the real thing as a message. We can see how the former digital form does not interfere with the *aura* of the original because it is purely informational, perceivable as informative collections for

⁴⁰ Cyark and ICOMOS announced a collaborative emergency cording and archiving programme in 2015: <https://cyark.org/news/cyark-and-icomos-announce-joint-initiative-for-emergency-recording-and-archiving> [Last accessed August 21, 2020], and Getty showcases its online exhibit of the city of Palmyra: http://www.getty.edu/research/exhibitions_events/exhibitions/palmyra/index.html [Last accessed August 21, 2020].

the public. The latter, on the other hand, is another kettle of fish as it lacks any connection to the local communities and historical contexts (beyond its destruction), as it transforms into something beyond appreciation and reproduction. This leaves it running the risk of becoming digital colonialism. In relation to the colonial undertones which may be present within 3D reproductions, is the issue of whether the digital preservations of destroyed heritage facilitates knowledge about the original ancient site (Bond, 2016). In other words, what do the 3D reproductions, such as the Palmyra Triumphal Arch and the Lion of Mosul contribute towards knowledge production about the historical and cultural context from which they derive? The reproductions create cultural exchanges and are integral to cultural representation, however they are at danger of becoming frivolous copies.

4.3 Considering Baudrillard's *Simulacra*

In continuation of the discussions surrounding the 3D reproduction of the Palmyra Arch and the complexities of it appearing as an aesthetic commodity, the consequences of the facsimile should be addressed. This leads us to the theoretical framework of Jean Baudrillard and a so-called 'Disneyfication' of heritage, known as *Simulacra*, as it is reproduced devoid of its complex meaning. Baudrillard's theory can be succinctly understood as follows: "In a world of appearance, image, and illusion, Baudrillard suggests, reality disappears although its traces continue to nourish an illusion of the real".⁴¹ Such reproductions have even been rejected by figures like Philippe de Montebello, the former director of the Metropolitan Museum of Art in New York (1977 to 2008), who states: "reproductions no matter how good, cannot and will not ever replace originals" (2004: 153). To suggest that the arch is an 'aesthetic response' to the violent actions of IS (as argued by Vaughan above) signifies a certain status of the copy. Within the theoretical framework of *simulacra*, the investigation of the effect of 3D printing heritage and the digital preservation of heritage after its destruction is achievable. The premise of *simulacra*, that there is a copy without an original, has been further considered by Michael Greenhalgh, who claims that reproductions "can never be any more than toy-town evocations of the real world, in the manner of Disneyland", (2016: 418) directly in line with Baudrillard's own criticisms. Consequently, according to the work of Baudrillard, the arch can be seen as signifying the post-modern condition of the

⁴¹ Quoted from the Stanford Encyclopaedia of Philosophy <https://plato.stanford.edu/entries/baudrillard/> [Last accessed January 28, 2023].

simulation of reality, as copies become part of a system of an appropriation of images through which identities are constructed (1984). What is important to reiterate here is that the term ‘simulation’ “threatens the difference between “true” and “false”, between “real” and “imaginary”” (Baudrillard, 1993: 3), raising questions about the role of the arch.

A distinction is needed between the arch being reproduced as an exact copy to replace what has been lost, and a reproduction which is only an imitation which does not attempt to embody the symbolic role of the original. Such a distinction changes the role of the reproduction of the arch. Replacing the meaning of the original means it ceases being a harmless and neutral reproduction. Moreover, Baudrillard emphasises the result of *simulacra* as *hyperreality*, whereby the importance and role given to the copy forms a society where the simulation is more intense and ‘real’ than reality.

Furthermore, it can be argued that the 3D reproduction of heritage (with the methodology of the collection and digital modelling of photographs (photogrammetry), to a certain extent lessen the impact of the destruction of the original. Due to such precise physical renditions of the original being created, the significance of the loss of the original may in time be overlooked. A significant outcome is the possibility that the destruction of heritage within the context of conflict and war may be justifiable due to its reproducibility as a 3D print, raising significant issues regarding the benefits of 3D reproduction. However as illustrated by Benjamin Walter’s theory of the *aura* and Baudrillard’s contribution to the discussion on the original/ copy dichotomy, the reproduction falls short of the original as the authentic; the copy can enter a new social and cultural sphere where it is internationally reproducible. Such dissemination of heritage should be critically analysed as the copy, or simulation, replaces the value and meaning of the real (original) — perhaps understood as a tool of power and colonial structures as the copy is imbued with new symbolic meanings. This can be applied to the Palmyra Triumphal Arch as its significance as a historical monument was subverted for a copy representing the strength of the West against IS, as the copy becomes aestheticized as a carrier for political messages. Fredricks expresses the same sentiment by stating how “the new arch cannot reincarnate or replace what has been destroyed. It can at best memorialise via *mimesis*” (2018: 532) (emphasis in the original). This further reiterates the complexity of heritage and its many influences and uses in social, cultural and political

dimensions, which is only compounded with the introduction of digital technologies of reproductions.

CONCLUSION

Having completed my research, I believe that heritage can be understood as a political body that needs to be approached with a certain level of scepticism and analytical thinking. This is never truer than with reproductions of lost heritage. Throughout the dissertation, it is marked that the recreation of heritage is not an objective process but is rather filled with parameters which need to be considered. Whether it's the selection of what is to be preserved, questions of both digital and material ownership of heritage after the original has been destroyed, or what the very reconstruction corresponds to in terms of motivations and politics. The destruction of Lion of Mosul reveals the politics and mechanisms behind iconoclasm today in the context of social media, as well as the reality of heritage within war zones. Their reproduction appears to be a homage to the loss of irreplicable heritage, however critical analysis is paramount; considering that it is owned under *Google Arts & Culture*, it has been removed from its historical basin and nation. The effect of this is something that would be particularly pertinent to investigate further as intellectual property enters the heritage sector. Conversely, the Bamiyan Buddha's hologram (temporally) returned the statue back to its community rather than uprooting it for global audiences, despite its sudden global fame. This highlights an interesting point about iconoclasm: it increases the visibility and desirability of the artefact as it became a household name, a fruitful avenue for further research.

As expressed by Hall, heritage is never a neutral aspect of culture, but rather it is part of the construction of an identity and therefore a valuable tool. I believe that this point is a crucial part of my work, underpinning much of my findings. It also stands with the Palmyra Triumphal Arch as I consider it to be an aestheticization and a symbol of resistance for the West against IS. Unlike the Bamiyan Buddha's hologram, the 3D printed arch offers nothing to the society from which it was exported. All of the case studies show in their own way the power of reproducing lost heritage, and the ways in which it can be utilised by nations and institutions. I would like to highlight here the importance of digital reconstruction and 3D printing, as these practices can shape which heritage is remembered, and in what state of preservation, by simply recreating them. Of course, this throws into question how to select which heritage artefact will be preserved.

Therefore, the Palmyra Arch, the Bamiyan Buddhas and the Lion of Mosul are large scale examples of the intersection of politics and cultural heritage as heritage cannot be simply viewed as an aesthetic aspect of the landscape; rather heritage takes a focal point of politics, identity, grand-narratives and even economy. It becomes clear that within the globalised system within which we are living at the moment, where images flash across our TV and computer screens of distant Other cultures, the idea of representation is ever more complex. Coupled with the more recent technological advancements of 3D printing and holographic projection, the ethical usage of heritage should be forefront in our minds. It can be said that more than ever heritage removed from its original significance and cultural context, the significance of which is indicated within this work due to the rootedness of heritage to cultural symbolism and the historical memory. Therefore, while we can argue for the ‘democratisation’ of heritage, a critical view is obligatory to uphold ethical protocols within the academic disciplines, from culture studies to archaeology. In light of this, several further critical analyses could be carried out to explore the complex relations between heritage, digital reproduction, representation and politics. Namely, the impact 3D printing is having on how we remember the past. Furthermore, I feel that an extended investigation into the politics of digital reproductions by paying attention to who is reproducing them and how is necessary. It may also be beneficial to analyse further to what extent current reproductions can be considered cultural commodifications, solely aestheticising cultural heritage.

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