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DFG Deutsche Forschungsgemeinschaft

Philipps Universität Marburg

Man, Woman, Child

Ethical Aspects of Metadata at the Pitt Rivers Museum

Rebecca Kahn

Abstract

This paper is concerned with the ethical aspects of museum metadata. These are not always immediately evident when working with the metadata related to museum objects, although, I will argue, they are embedded in the object, accumulated at each phase of its journey into the institution; and continue to accumulate while it is part of a collection. This takes place against a backdrop of new development and possibilities afforded by digital technologies for building connections between and across heritage collections online, which can result in these complicated metadata potentially entering the data ecosystem. This eventuality, I will argue, has ethical and technical implications which need to be considered and understood through the theoretical lenses of critical data studies, museum informatics and the growing calls from museum scholars and others to decolonisation of museum collections. Using a small collection of drawings from the Pitt Rivers Museum of Anthropology and World Archaeology at the University of Oxford, I will demonstrate how difficult museum metadata can be buried deep in museum documentation, and how this data, once brought to the surface by digitisation, can expose the trauma of a collection's origins. I will go on to ask whether the current models used to share heritage data online are appropriate mechanisms for materials with such sensitive histories, and ask how best to handle them in the increasingly digital future.

Keywords: Museum data, Museum digitisation, Ethnographic data, Data decolonisation, Anthropological museums, Museum big data, Critical data studies

Introduction

This paper considers the problematic ethical issues embedded in museum objects, their digital records and, consequently, their metadata. This complex metadata is accumulated throughout the object's life, are stored in a variety of locations, are transmitted when the records are digitised, and spread across the web when

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digital records are connected to others, either by means of semantic web technologies or in shared repositories.

Managing complexity in cultural heritage collections data management is an emerging field, and in this regard, this paper takes an impetus from the collections as data approach, which originated among libraries, but is equally pertinent to museum collections. This approach reframes all digital objects in a collection as computationally processable data, rather than as individual, discrete objects (Padilla et al. 2019). By viewing a collection in this way, it becomes possible to step back, and view the full composite nature of a collection, the connections within it and what it links to (Padilla 2017). This approach forces us to examine collections within broader social, ethical and informational contexts, which I will illustrate by examining a subset of collections data from the Pitt Rivers Museum at Oxford University[1]. The collection consists of 1,600 drawings made by children in North America and Britain and their associated records, which were collected by one pioneering female anthropologist between 1923 and 1925. This collection was created during a historical period when attitudes towards ownership, recognition and consent were different to today, and this paper will show how these attitudes have been embedded in a set of object metadata that can be read as deeply political, revealing relationships of power, identity and consent which continue to be controversial in museums today. At the same time, these relationships also require that we question whether an approach that sees heterogenous, complicated museum data as a source for mass computational processes is always appropriate. The paper will consider the ethical and technical challenges of making this information visible online despite a growing research context in which searching for digital content is increasingly taken to mean 'just Google it'.

The Pitt Rivers Museum

While the drawings which form the case study will be described in detail in the later sections of this paper, at the outset it is important to describe the intellectual, historical and institutional context in which these drawings were collected, and documented.

The Pitt Rivers Museum (PRM) is a museum of archaeological and anthropological collections, founded in 1884 with an initial collection of about 22,000

1 The author would like to thank the organizers of the original data sprint, Dr Anne Luther, Krystelle Denis and Alex Horak. I am also indebted to my fellow workshop attendees, Meghan O'Brien Backhouse and Marenka Thompson-Odlum of the Pitt Rivers Museum, Ilias Kyriazis of the Deutsche Nationalbibliothek and Jules Sauer from Sciences Po, Paris, for the initial collaborative work on the provenance records in the Pitt Rivers Museum database.

archaeological and ethnographic objects collected between the 1850s and early 1880s by General Augustus Henry Lane Fox Pitt-Rivers (1827-1900) an officer in the British Army and part-time archaeologist and anthropologist. Today, it holds roughly 312,000 objects of archaeological and anthropological origins from around the world, as well as extensive photographic and manuscript collections. A fraction of these objects are displayed in the main court, upper gallery and lower gallery of the museum in Oxford. These rooms are, in many ways, a fulfilment of the fantasy of a traditional museum - glass cases are closely packed together across the main court and filled with spectacular objects. One of the hallmarks of the PRM is that the materials are not displayed chronologically, as in many other museums, but typologically, by how they were used. Thus, a case displaying money might contain cowrie shells collected in the Punjab in the 1890s, an Italian postage stamp used as currency during WWI and a compressed brick of tea used as currency in Tibet and collected in 1935. This arrangement is not only visually exciting - it can also be read as an expression of the PRM's historical role in the development of western, specifically British, anthropology as a discipline in the late 19th century. At the time, the field was notable for the close networks of anthropologists, ethnologists, scholars, colonial administrators, collectors and curators who helped to shape the discipline. These early social anthropologists focused on topics that can be loosely defined as the 'phenomena of culture', such systems of kinship, ritual and religious practices (Ingold, 1985) and took the evolutionistic view that non-Europeans are undeveloped in comparison with Europeans, whose society was sophisticated, rational and advanced (Soukup, 2014).

These interrelated networks of individuals, who worked, studied and travelled together shaped the museum through the materials they collected (Gosden 2009) and were members of the same scholarly societies and academic elites who frequently crossed paths over the course of their research and teaching (Larson et al, 2007:213). This network of associations is significant, for a few reasons: Firstly, the shared anthropological backgrounds of many of the collectors and curators resulted in unusually high-quality documentation for many of the objects, which, as we will see later, is important in a study of the museum's metadata. Alison Petch, writing in 2003, attributes this to the fact that the PRM was able to attract high-calibre staff who stayed at the museum for a long time and who had a very keen interest in the processes and techniques of documentation itself (110). Secondly, this network of early anthropologists and the high quality of the documentation they produced can be seen as bolstering the legitimacy of a museum which was a beneficiary of the reach of the British Empire (Hicks, 2013). The act of collection is never neutral, and if the ethnographic project of a museum - namely to collect, classify and display material culture is to be legitimate, it must prove that this has been done in a systematic and intentional fashion, rather than a fetishistic or souvenir-driven one, which would de-legitimise the project (MacDonald and Silverstone 2006, Pearce 1992). At the PRM this has resulted in many richly described objects, with in-depth records, which, as we will see later, are also replete

with accumulated significance. As Dan Hicks, currently curator of World Archaeology at the PRM points out, anthropology museums represent a unique index of Victorian colonial history, and often became vehicles for the militarist vision of white European supremacy that characterises that period (Hicks, 2020: 30). While the intertwined histories of several of the collectors and curators who contributed to the acquisition and documentation of materials at the PRM have been a subject of in-depth study (Petch 2003, 2014) until recently scant attention had been paid to the colonial contexts in which many of these objects were collected (Hicks, 2020: 73), and the associated questions of power, permission and consent that this raise. These issues, and how they manifest in the metadata of the PRM collection will be explored further in the theory section of this paper.

The ethics of children's data

The use of children's figurative drawings as a source for anthropological research has a long history. Canonical early 20th century anthropologists such as Margaret Mead, Meyer Fortes, Gregory Bateson and Cora duBois all collected drawings by children during their fieldwork in Papua New Guinea, the African Gold Coast, Bali and Indonesia. This work is marked by particular attitudes to their subjects, which were prevalent at the time - they were interested in the development of society and culture, and since children were understood as unformed adults who were still learning these things, Mead and those who followed her deduced that by researching children, they were able to investigate the processes through which children acquire culture, not the society and culture itself (Soukup: 553). The prevailing perspective also paralleled the relatively crude art produced by children with that of 'primitive' art made by other racial groups, and so the study of children's art was seen as a way of gaining insight into the so-called primitive minds of the societies they were studying (Unger-Heitsch, 2001; Gamradt & Staples, 1994). Indeed, much of the early 20th century anthropology which used children's drawings as a source can be characterised by its positioning of children as 'simple, or less complicated' than their adult counterparts, thus justifying the researcher's view of them as valid subjects, without the need to ask their permission (Phillips, 2014). This framing is important when we consider the works which make up the case study, and how they were described and documented. In contrast, researchers today understand that children, rather than being simple versions of adults, have their own agency, are capable of understanding the concept of consent, and of giving it (Niell, 2005; Mitchell, 2006). Drawing on the UN Convention on the Rights of the Child, there is a growing acceptance among researchers that children have the right to be 'properly researched' that the traditional ethical frameworks for offline data collection, analysis and regulation should be extended into the digital world and that tighter data privacy controls for children's data should be enforced (Berman & Albright, 2017). In the context of the PRM collection, this sensitivity

to protecting the identity of children means that very few of the drawings are available via the museum's online collection database, and no identifying information is made public[2].

Theoretical Background

Theoretically, this paper draws on several schools of thought which could be loosely grouped under the umbrella of digital humanities approaches, since they are all concerned, to one extent or another, with what Christine Borgman characterises as data scholarship in those fields which are concerned with the study of human culture and the human record (Borgman 2015). Humanities scholars rely heavily on artefacts – texts, maps, archival sources, images and objects which, until fairly recently, only existed in physical forms. Using these sources required visiting museums, archives and libraries, and making use of finding aids such as catalogues and indexes to locate these artefacts, and provide contextual information about them. These aids were (and still are) the products of the processes of acquisition, classification, retention and conservation, enacted by librarians, archivists and museum curators, who made certain choices about what to include and exclude, giving shape to the collections under their care (Bowker 1997; Star 1999). The result is collections that are not neutral agglomerations of facts, but rather sets of information that can be read as having an agenda of their own. This idea of the constructed agenda is highlighted by Langdon Winner, who argued that it was possible for artefacts to have their own sets of politics, distinct from those of the social and or economic systems in which they are embedded (Winner 1980). He presented two possibilities for this – firstly artefacts which have been designed in ways which enable a means of establishing certain patterns of power or authority, or, secondly, technologies which are inherently political in and of themselves. This second type displays or contains properties which are unavoidably linked to certain institutionalised patterns of power and authority (134). In this paper, I will show that museum records are of this second type, as are the knowledge management systems, ranging from paper catalogues, to digital databases and semantic data models which we use to which we use to organise them. These institutionalised power relations have made these systems a topic of study for scholars of museums and critical data studies, who pivot these technologies from representing one type of power or authority to being representative of multiple authoritative voices, then engagement with their latent politics is essential.

2 In the case of the image illustrating this paper, it is accessible only because no associated surname cannot be found, thereby making it impossible to identify the child.

Defining Politics

In their introduction to the special issue of this journal which dealt with Big Data, Mark Coté, Paolo Gerbaudo and Jennifer Pybus argued that Big Data is political in the same way in which identity, the body, gender, sexuality, race and ethnicity are political - that is, as sites of struggle over meaning, interpretations, and categorisations of lived experience (2016: 5). These conditions, I would argue, are no different for metadata, and it is from Coté, Gerbaudo and Pybus' assertion that I draw a working definition of the politics of museum metadata as the politics of struggle. In a museological context, this can be seen through the practice of recording all information about an object in its metadata, which is generally defined as data about data and scholars generally agree that it has been in existence for as long as humans have tried to organise information (Baca, 2016, Gartner, 2016). While in the past this may have been the preserve of cataloguers and librarians, metadata is increasingly gaining attention and becoming more visible as the mass digitisation of what we read, how we communicate and where we search for information has become reliant on, and a source of, different kinds of metadata. Tags, descriptions, keywords, and search terms are all forms of metadata, which we both use and produce constantly. Many scholars of Big Data have made the point that data is never truly neutral or raw (Iliades & Russo, 2016; Graham, 2015; Gitelman, 2013; boyd & Crawford, 2012,) but has been shaped and influenced by those who collected it. This is not news to information professionals such as librarians, curators and archivists who have been selecting, appraising, including and excluding certain elements of the data related to the objects in their care for much of recorded history. As Gartner points out, no metadata can ever be said to be neutral, rather it should be understood as a human creation, which bears the imprints of the progenitors who made the initial decisions of what data to include or exclude and presents a subjective view of their world outlook (41). In museums, these imprints are embedded during the making of metadata, or, as Turner (2020) specifies, in the record keeping, data collection and digitisation that makes up a significant aspect of contemporary museum documentation practice (4). The choices made by the individuals who facilitate the collection, classification and organisation of knowledge in cultural heritage collections are codified in records; when records are digitised, the choices become part of the data of the collection which, in turn is encoded into the metadata (Beltrame and Jungen 2013, Beltrame 2016, Geismar and Mohns 2011; Geismar 2018). The resulting collections, argues José van Dijck are a view of reality which is far from being either comprehensive or objective, but consists, rather of 'value-laden piles of code that are multivalent and should be approached as multi-interpretable data' (2014: 202). These analyses of metadata highlight its ideological potential, and it's capacity to express a particular view of the world, a capacity which makes it inherently political. In museums metadata not only a tool for describing and creating meaning and interpretations of information objects – it also controls the classifications and categorisation of

the lives of the individuals connected to the objects – rendering it inherently and entirely political. As Iliades and Russo argue 'Data, along with its sciences and infrastructures, are informed by specific histories, ideologies, and philosophies that tend to remain hidden' (p2). As this paper will go on to show, the ideology of museum data challenges us to expose these histories but also to consider and manage the ethical considerations of the data with care.

Objects, Biographies and Museum Metadata

Since the late 1980s, the agentive turn in social studies has embedded the notion that material objects have social lives and biographies, through which we can trace their creation, movement, uses, possible commodification and, in the case of museum objects, reification into collections (Kopytoff 1986; Appadurai 1988). Museum scholars were quick to take up this perspective, and apply it to their own context (Pearce 1994; Hoskins 2006; Dudley 2012; Geismar 2018). They argued that the process of collecting is an inherently selective one, and that the decisions regarding which objects to include and which to exclude creates narratives within the collections, through which we can read as much about the people who made the collections and documentation as the objects themselves (Enright, Hellinga, and Leigh 1989; Turner 2017). When these narratives are layered on top of each other, we arrive at an understanding of museums as sites of complex narratives and multiple voices, which tell us a great deal about the institutions themselves (Gosden and Marshall 1999; Alberti 2005). This holds true for museum records as well, where the biographies of the records reflect the subjective decisions of the people who created them.

The computerised collections management systems used in museums today have centralised the role of metadata, as the source of all internal knowledge about an object (Navarrete and Mackenzie Owen 2016; Cairns, 2013). Within a collection, it is the metadata that makes the object findable, allows connections to be made to other objects which share certain attributes, and ultimately enables it to be shared online in useful ways. In institutions that have been collecting for centuries, and where documentation may be messy or idiosyncratic at best, these records offer the best mechanism for the internal discovery of objects (Griffiths 2010). Increasing numbers of cultural heritage institutions are publishing their collections online, using various different digital tools and platforms, and with a variety of different access and usage restrictions. However, the advent of digital technology has not removed all the constraints to providing access to these metadata records. In fact, some restrictions have had to be added in order to manage these large collections of heterogenous data online (Freire et al. 2018; Anderson and Blanke 2012). For example, the proliferation of different descriptive vocabularies used in individual institutions has made interoperability difficult, resulting in the need to use shared ontologies and data models such as Dublin Core and CIDOC-CRM which facilitate

interoperability, but also risk losing contextual detail. However, there are significant drawbacks to this approach, as few of the models make allowance for contextualising metadata, which is crucial for the verifiability and quality management of the data (Sikos and Philp 2020), as well as maintaining the attribution record (Bechhofer et al. 2010). Thus, in order to manage the volume of resources, and support the interoperability required across data collections and between different ontologies, a paradoxical situation has arisen - in order for links to be made across data collections, a mass of interoperable data is required. However, in order to be interoperable, this data has to be pared down to an essential minimum, rendering it less useful for the kinds of enquiries humanities researchers might undertake. This risks putting data into the ecosystem without added context, which is crucial to its ethical use. In museum collections, this contextualising metadata is often entered as free text, rather than controlled terminology. Free text fields are difficult to manage in automatic search and linking technologies, due to a lack of controlled vocabularies, and so often this information is not readily available. As the case study will show, this has resulted in a chicken and egg scenario: contextual data is essential to providing users with a deeper understanding of the biographies of the collection, but it is created and stored in ways which make it difficult to access. If the data is too precarious to be shared, does that mean that we need to find better approaches to sharing it, or should it not be shared at all? These questions are increasingly being asked by museum professionals, particularly those who work with collections which have their roots in histories of oppression and colonialism, and for whom the question of how to decolonise and share data are preeminent, and are, I will show, central to considering how to manage the metadata of the Pitt Rivers collection which forms the basis of the case study.

Decolonising Data

Over recent years, there has been an increasing discussion among museum scholars and professionals about the need to decolonise their collections (Boast 2011; Boast and Enote 2013; Srinivasan et al. 2009; Nakata et al. 2008). In many cases, these discussions focus on the display and documentation of individual objects and collections, but this impulse also has implications for data infrastructures. Led by institutions in Canada, New Zealand and Australia, digital infrastructures have been developed which seek to find a balance between the desire for digital accessibility, the need for cultural accountability and legal and cultural restrictions on who may or may not have access to certain cultural materials (Brown and Nicholas 2012). The Pitt Rivers is no exception: access to their collections online is mediated by a cultural warning which alerts users to the fact that some records were created using scientific research models and language that is now considered outdated and offensive, and that some of the records contain information or photographs of objects associated with ritual or ceremonial activity

that cannot be made public due to prohibitions in Indigenous communities relating to the age, gender, initiation and ceremonial status or clan of the viewer. These restrictions are crucial to the ethical management of museum data. But in the context of sharing large sets of museum metadata online, for example via a SPARQL endpoint or a data dump, the practical realities of managing these restrictions can be a challenge. In a recent sample of materials taken from Europeana, the European linked cultural heritage data aggregator, several examples of ethnographic materials which include images of human remains were found, despite restrictions on the display of these objects being implemented in the supplying institution (see Kahn and Simon, forthcoming).

The Pitt Rivers is also taking more concrete steps towards decolonising its collections. Pressure is on European museums, as sites of display of items which were stolen and looted from colonial societies, to push further than the dominant modes of reflexivity and self- awareness, in order to 'open up and excavate our institutions, dig up our ongoing pasts, with all the archaeological tools that can be brought to hand, sometimes a teaspoon and tooth- brush, other times a pick-axe or a jack-hammer' (Hicks 2020: 19). At the PRM this excavation has taken the form of several research projects, some of which have sought to revisit the way the museum displays and uses outdated racialised language in its records and others which are working to develop plans for the restitution of certain objects from their collections to communities in Nigeria, Kenya and South Africa. It was within this context that the PRM made their database available to researchers for the workshop described in the next section. These efforts are admirable, and go much further than many other European museums are. However, as I hope to show in the remainder of this paper, the ethical complexity of museum metadata can often be buried very deeply in a database, and require significant digging to be brought to light. These excavations may reveal significant narratives, but the question of how to manage these complex, even explosive data artefacts in an increasingly digital context remains vexing.

The need to balance on the one hand technical requirements for access and on the other, the need for sensitive treatment of museum data becomes more urgent as data scientists are increasingly turning to heritage collections as sources of structured training data for machine learning and artificial intelligence (AI) algorithms. The attraction of using data pre-collected and curated by archivists and librarians is easy to see. However, this approach presents its own risks - the topic of managing data bias in cultural heritage collections is also in its infancy. Thanks to the recent work of scholars in the field of library studies (Reidsma 2019; Coleman 2020; Padilla 2020) and machine learning and AI (Buolamwini & Gebru, 2018, Jo & Gebru, 2019) there is a growing understanding that the work of curators, archivists and librarians has value for the development of automated discovery and interconnection systems. However, these scholars are also quick to point out that heritage collections are not neutral, and that both legacy collections and incoming

data need to be reviewed routinely for evidence of inherited or inherent bias must be considered before wholesale ingestion of large heritage datasets takes place.

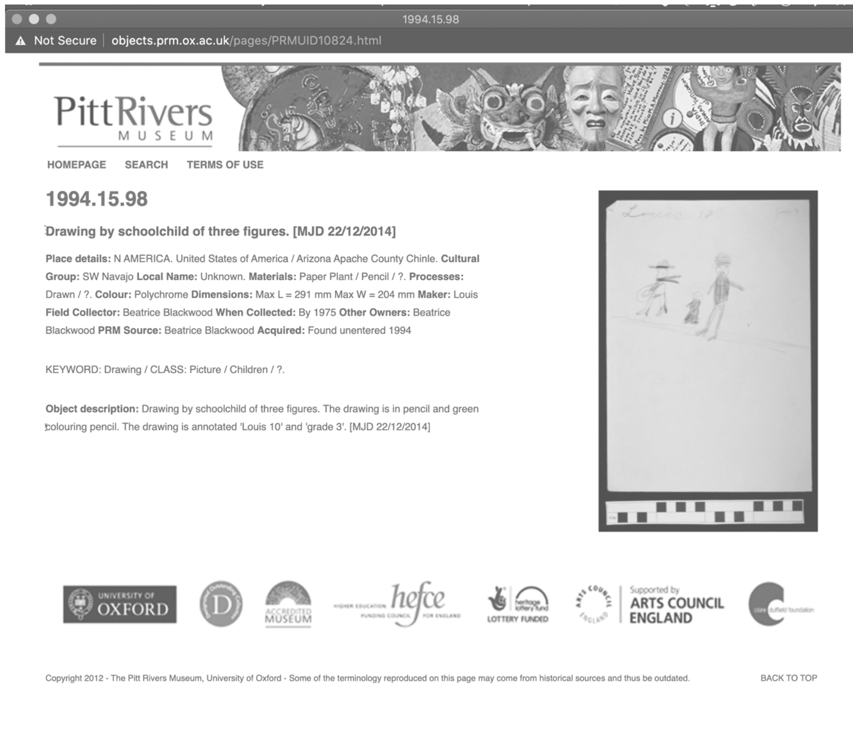
Methodology: Behind the scenes in the museum database

The data used in this case study was extracted, cleaned and examined as part of a four- day workshop entitled 'Activating Museum Data for Research, Scholarship and Public Engagement' held between September 30th and October 3rd, 2019. Hosted by the Department of Modern Art History at the Technical University of Berlin and funded by a grant from the Volkswagen Stiftung, the workshop was held in conjunction with the Pitt Rivers Museum at Oxford University and Sciences Po Media Lab Paris, with the intention of instigating collaboration between scholars with an interest in exploring the data of cultural materials and initiating new tools for exploring and visualising data from cultural collections. The workshop was designed as a data-sprint - an approach outlined by Venturini et al (2018) which facilitates bringing participants from a broad variety of backgrounds together to work on a dataset for a limited period of time in order to develop potential research questions from it. The method is ideally suited to working intensively on a large amount of data, while at the same time eschewing the ideal of exhaustivity which is often associated with big data explorations. Implicit in the model is the understanding that participants will only manage to treat a limited amount of digital material and that results will be, at best imperfect. These constraints are considered as a methodological challenge, rather than a weakness (2).

This 'quick and dirty' approach was particularly apt for the event, since we were working with the objects database of the Pitt Rivers Museum, a set of records for over 300,000 artefacts. The database was created in the 1990s, when the museum began to digitise their accession book entries for all the objects in the collection. During this process, individual entries were created for each object listed in the Museum's accession books, and as the objects were retrieved, examined and catalogued as part of the day-to-day collections department work, these entries were added to. In the in-house version of the database, used by PRM staff, volunteers and visiting researchers, there are 52 information fields for each object record, containing a range of descriptive, administrative, and technical metadata. For the purposes of the data sprint some of these fields were removed, including confidential data, data related to where the objects are stored, conservation processes, and whether any hazardous substances were included with the object (the PRM collection includes several objects containing lead, poisonous plant matter, and poison tipped arrows and darts). What remained were roughly 31 fields-worth of data, totalling about 120MB. Before being given access, all participants had to sign a non-disclosure agreement, in which we agreed not to share the data without prior permission from the PRM. We were also warned about the language used to describe some of the objects in the collection. This warning is

standard for any researcher who tries to access the PRM's collections online, and is described above. With these considerations in mind, workshop participants set out to identify and discuss possible areas of investigation, and then to work with the data we had to hand.

The public-facing interface of the Pitt Rivers Museum Collections Online, showing the record and thumbnail image for one of the drawings (accession number 1994.15.98). Image courtesy of the Pitt Rivers Museum, Creative Commons CC BY-NC-ND 4.0



The process of identifying questions was initially approached as a collective exercise. Questions around provenance, descriptive language, missing data and the physical display of certain objects were all discussed as possible topics. Individuals then coalesced into working groups around the questions they were most interested in. The group in which I found myself decided to tackle the issue of missing provenance in many of the records, and in particular the overwhelming absence of the names of creators for many of the objects in the collection. The group felt that looking into the provenance of these objects would be a good way to try and uncover some of the narratives that might be latent in the collection. These stories would, we hoped, be able to tell us about the objects themselves and about the documentation practices at the Pitt Rivers at the time they were accessioned. For the purposes of this exercise, we focussed on the fields which described where

and when an object was collected and by whom, who made them, and the source community or cultural group from whom the object was collected. We also found ourselves frequently cross-referencing these with the information in the *Primary Documentation* field. This field consists of descriptive details about the individual objects, entered as free text strings by collectors, curators and cataloguers who have worked with the collection over the years.

Named Makers

The first step in finding out how many of the objects in the PRM's collection had a named maker required us to do some basic sorting of the data. In order to reduce the dataset to a more manageable size, it was necessary to remove all records which had no maker recorded, either as blank entries or the term 'unknown' or a variation of that. This left us with about 5% of the collection, roughly 12,500 objects which had an explicitly named maker. Once this subset had been established, it was possible to use Open Refine's text facet function to sort out those makers who were most likely to be individuals, from those which were not. The PRM collections include a significant number of trade objects made by named companies, such as guns, buttons, beads and candles, and for which the name of the manufacturer is listed in the 'Maker' column. On the other hand, the faceted search also revealed objects with maker entries such as 'Unnamed French prisoners of war' (PRM object 1945.2.3). We decided to leave these entries in, since they showed evidence of an attempt to provide an identity to the maker.

For the next step, we decided to look at who had collected the objects, in the hope of finding a discernible correlation between individual collectors and the practice of naming a maker, and in particular the gender politics of collecting practices. Were female collectors more or less likely to name the makers than male collectors? Could we ascertain a point in time when male collectors start naming the makers of objects, and when female collectors began to show evidence of the practice? And would we be able to identify when (historically) and where (regionally) female anthropologists were active in the field? Exploring these questions required us to sort collectors by gender, including codes for male, female, unknown or both, since many of the field collectors were recorded as husband and wife teams. Through this process we were able to identify 535 individual field collectors. The most prolific was George Phillip Elphick, a historian of church bells, who also named himself as the maker of several thousand casts of bells, and to whom we were able to attribute 2629 objects. However, fairly close on his heels was Beatrice Blackwood, a legendary figure in the history of the Museum and the history of British anthropology. She collected 2233 objects with named makers. The next most prolific collector, Henry Balfour, only named the makers of 485 objects, while Gigi Crocker Jones, another early female anthropologist and collector, was the fourth most prolific with 248 named makers among her acquisi-

tions. These statistics struck us as intriguing. Firstly, the large gap between the first two collectors and the subsequent two is notable. The almost even gender split, with two women and two men in the group seemed worthy of deeper exploration as well.

It is at this point that the narrative of this paper requires a shift in gears. The data sprint group went on to continue our explorations of the male and female collectors who named the sources of their objects, and to visualise and compare where and when these individuals collected, using a set of different visualisation tools. These collaborative results will, it is hoped, form the basis of a joint publication in the future. However, for the remainder of this article, I will go on to describe research I undertook on my own into the materials collected by Beatrice Blackwood.

Beatrice Blackwood: pioneer product of her time

An anthropologist and field collector, Beatrice Blackwood (1889-1975) was an early British anthropologist who worked at the Pitt Rivers from the late 1930s until shortly before her death in 1975, and effectively ran the museum from the early 1940s onwards. She studied anthropology at Oxford in 1916, and between 1923 and 1928 conducted field work in North America, during which time she collected objects for the museum (Larson, 2011). Of the roughly 5000 objects listed in the database which were collected by Blackwood, during the workshop we were able to identify 2233 objects which included an individual name in the creator field. We were immediately struck by the large number of children's drawings in this subset, many of which seemed to have been collected from a variety of cultural groups in North America, and noted these objects as worthy of further exploration. However, due to the time constraints of the data sprint, and the knowledge that our efforts would never be exhaustive, the focus of the workshop group shifted to broader questions of gender and collecting practices. However, the children's drawings stayed in my mind, and in 2020, after receiving permission from the PRM to continue working with the data, I undertook to find out more about these drawings, and where they had been collected.

I began by creating a subset of the 1626 drawings collected by Blackwood. Again using a faceted search to cluster entries in the 'Region' field which have similar features, I was able to determine that they had been collected in the United States (specifically Alabama, Arizona, San Francisco, Tennessee, Kentucky, North Carolina, Minnesota, New Mexico and South Dakota), Canadian British Columbia, Buckinghamshire, Wimbledon, and other unspecified parts of Britain, and were made and collected between 1923 and 1927. Most of these records provide a full name and surname for the creators in the 'Maker' field, some only provide initials. The 'Description' field gives more detail on the drawings, most of which are figurative, with at least two people in them. Some provide explanation of what

the scene contains - for example, one is described as a 'Drawing by schoolchild of three figures. The drawing is in pencil and green colouring pencil' (Pitt Rivers Collection, Object no: 1994.15.98, see Fig 1 for illustration). In others, several dozen drawings will have the same description, such as 'Drawing by a child of three figures'.

What stands out, however, is the information entered into the 'Cultural Group' field. Blackwood recorded the drawings as being made by children who were documented as 'African American', 'Chinese', 'Navajo', 'Zuni', 'Chippewa', 'Ojibwa', 'Mexican American', 'Sioux', 'Kwakwa ka wakw', 'European British' and, in some cases, simply 'American'. On sorting the results by *Region* it became evident that many of the drawings had been collected on what were, at the time, called 'Indian Reservations' (now known as First Nations Reserves) and at residential schools for Indigenous Americans and Canadians. Others had less detailed descriptions, such as the 99 drawings made by children described as 'African American' which were recorded as being collected in 'Alabama Montgomery', or over 400 drawings made by children whose *Cultural Group* field records them as 'Chinese' and were collected in 'California, San Francisco'. In total, I was able to locate 29 different schools listed in the *Region* field, and by their names was able to tell that twelve of these were residential schools – institutions which were established by the American and Canadian governments for the purpose of educating Indigenous children. However, not all of the drawings had specific details about the schools recorded in these fields, and so I realised that it would be necessary to cross reference the records I had found with the information in the *PrimaryDocumentation* field, since I suspected that more information might be located there. This was possible by searching for individual records using the accession number, but crucially, it had to be done using the data supplied by the PRM as part of the data sprint, rather than using the PRM's Collections online web portal, since much of free text in the *Primary Documentation* files is not available on the web because it contains identifying information.

Reading the Drawings

Reading the *Primary Documentation* files, it became evident that Blackwood attached detailed notes to some of the drawings, describing the figures, the children who made them and how the drawings were collected. In this note, attached to a drawing collected at the school attached to Fisk University, (a historically Black university which was founded in the 1860s to educate freed slaves after the Civil War) we find out about her collecting process, intentions and anthropological approach:

'These children were told to draw 'a man, a woman and a child', what the thing that looks like a cross between a centipede and a beetle is, I can't imagine... these drawings which

were given to me this morning, are by the children in the school here where the students get their teaching practice. Unfortunately the teachers only got them from the very smallest children, I am trying to get the next grade too… I'll get some more from Tuskegee, they will make and interesting comparison, especially as I can get Indian children's drawings next year, and possibly also Chinese…/ Yours ever / Beatrice Blackwood' (Pitt Rivers collection, Object no: 1994.15.846)

Blackwood also annotated many of the drawings with details about where they were collected. For example, in the drawings made by children at Vest Community Centre, Kentucky, Blackwood notes:

'Drawings by Children of the Vest Community Centre, Kentucky. This school has been going for two years, many of the children had a little very inadequate teaching before this in low-grade county schools. They have never had drawing lessons. Some of them, particularly the bigger boys were ashamed of their efforts and said they couldn't draw. Two big boys got up and went off home when I explained what I wanted done. They do that whenever anything doesn't please them, and the teacher can't do anything about it. Attendance very irregular especially in winter, except for some of the children who live at the school.' (Pitt Rivers Collection, Object no: 1994.15.1474)

In another example, collected at the US Indian Boarding School, Chinle, Arizona, we find Blackwood's note which reads:

'Chin Lee [sic] is 80 miles from the railroad in the heart of the Navajo Reservation. The children all come from the reservation and have not been in contact with white people much except in school. Their drawings are typically Navajo in most cases. They have a drawing period in school but have never been taught to draw people. The boys said they couldn't draw a man without a picture to copy from, and mightn't they draw horses instead!' (Pitt Rivers Collections, Object no: 1994.15.98)

Some drawings done by children at the Calhoun School for African American children in Alabama include the annotation 'N.S' after their names. Blackwood's notes reveal that this stands for Night School, and that:

'Night School' children are those who have no money to pay for their board so they work at a trade all day and are paid for it a little more than they need for their board, this is accumulated for them till they have enough to enter the day school. Meanwhile they study and have classes from 7-9 every evening after their day's work. So they are far behind other children of their age.' (Pitt Rivers Database, primary documentation, Museum object number 1994.15.929)

Other records reveal annotations on individual drawings. On one, a note states that the child '…had the bright idea of putting the second eye outside the face!

I haven't seen that done before!' (Pitt Rivers Database, Museum object number 1994.15.960). These notes, although inaccessible to most users, reveal the richness of this collection, in ways which were not immediately evident from the basic records. They also reveal the multi-layered politics embedded in these metadata records, the most obvious of which is the traumatic histories behind the Residential Schools.

Residential Schools

In both the USA and Canada, residential schools were established to force assimilation and 'civilisation' on the children who attended them, in a long-term attempt to destroy Indigenous cultures in North America. Indeed, in 1920 the Canadian deputy minister of Indian Affairs predicted that in a century, thanks to the work of these schools, Indigenous people would cease to exist as an identifiable cultural group in Canada, thanks to this genocidal policy (Nagy and Kaur Sehdev, 2012). They were sites of physical, sexual and emotional abuse, as well as illness and malnutrition (Reynaud, 2014; Lightfoot, 2015). Many communities consider the schools to be the sites of explicit Indigenous genocide and cultural loss (Davis 2001; D. B. MacDonald and Hudson 2012). Although in 2018 Canadian Prime Minister Harper made a public apology on behalf of Canadians for the Residential School system, this history continues to be a source of pain. The history of these institutions and their long-term impacts on Indigenous communities is also increasingly being investigated as part of a complex web of structural inequality and violence which have long-lasting social, political and personal implications for the communities affected (Gone, 2017, Walsh & Lopes, 2009). As Metis scholar Marie Battiste writes, the school systems was were part of a broader 'cognitive imperialism', through which settler knowledge systems, by means of systemic and structural power, were positioned as exclusively legitimate, while Indigenous knowledge systems were deemed parochial and pushed to the margins of institutionalised education (Battiste, 1998, Nagy & Kaur Sehdev, 2012) In the context of the children's drawings at the PRM, it is important to consider these social and political contexts, as they manifest in the metadata.

Conclusions

If metadata is political because it is both ideological and a site of struggle, then the descriptive metadata attached to the drawings reveals an array of political issues which must be considered in the context of digitisation and sharing this data. First, there are the Blackwood's own professional intentions, as evidenced in her notes, about comparing the work of children from different cultural groups she was collecting from. Secondly, we have to consider Blackwood herself, an excep-

tional woman working in what was, at the time, an overwhelmingly male field. Thirdly, and perhaps most significantly, we have to consider the political struggles of the communities from whom she was collecting, and finally, there is the politics of the subjects whose work she was collecting - namely children.

Blackwood's choice of sources reveals an interest in communities who were distinctly marginal - located in remote rural settlements such as Kentucky, on Indigenous reservations or in communities of outsiders, such as immigrants. From her notes, it is clear that the social context in which the children lived was as significant, as the details of the drawings. However, the ethical questions about this context were less of a concern to her, although they are extremely significant today. If the drawings were made as part of a school exercise, we need to consider whether the children were informed about the objectives of what they were being instructed to do. Did they know what the drawings were to be used for, or give their permission to have them collected, and their names and ages recorded? In some ways, this information is what makes them exceptional - as Turner notes, it was uncommon for collectors of this period to attribute work to individual makers, since they prioritised 'pure facts' over individual experiences, resulting in a practice of field collecting which strove to remove any subjective voices of individual creators and leading to an overall absence of Indigenous voices in museum collection documentation (665). It seems evident that Blackwood did not take this view – naming the children and noting their ages marks them out as individuals and served a particular anthropological purpose. And while it is probably fair to say that by choosing to collect works created in an educational context meant that the children had little choice but to agree to produce what was asked of them, Blackwood's notes also show us that, in some cases, the drawing exercise did generate individual responses from children, and those too were considered worthy of recording. At the same time, however, it is this detail which makes the images impossible to show to the general public. Contemporary sensitivities to the privacy of the children, even applied retrospectively, requires access to be limited for reasons of data privacy.

Secondly, the story the metadata tells us about the intellectual and social backdrop against which they were created may preclude it from ever being made public. Andrea Walsh, a Canadian anthropologist who has worked extensively on the art created by survivors of the residential school system explains that, sometimes, it is necessary to remove these works from the public view for good (Watts, 2017). While the PRM is careful to ensure that no identifying information about the makers of the drawings is available via their online collections database, thinking about the drawings raises the question of how to think about not only this data, but the many petabytes of collections data like it around the world, particularly in light of the demands for access to increasingly large amounts of museum metadata. How can data curators balance the appeal of these large-scale sources of curated, computational information, which form the basis of the collections as data approach, with the need for granular attention to the ethics of indi-

vidual objects? Making such detailed exceptions is almost impossible to manage automatically or algorithmically, but it is difficult to imagine how, in an increasingly digital future, researchers and institutions might manoeuvre around these explosively powerful objects, buried deep in a collection's records.

What began as an exploration into the PRM database with the intention of discovering which collectors named makers revealed an unexpected set of data with many layers of power dynamics, from Blackwood's interest in marginal communities, to her co-option of institutionalised authority as part of her collecting modus, to the powerlessness of her subjects, the children who did the drawings and were embedded in those systems. All of these realities were transferred into the collections of the Pitt Rivers museum through Blackwood's careful recording of the descriptions, names of the children, and the notes she included in the primary documentation.

The question which faces museum staff and researchers now is how to manage this digital information, and this paper represents only an early, tentative attempt to outline the challenges to hand. The data's politics should not deter us from working with it – that would be unhelpful. Without a doubt, certain aspects of the collection make it impossible to imagine adding it to a linked data collection or aggregated repository without making significant redactions, which would render it less than useful. However, it can also tell us a great deal about life in these communities – the drawings reveal how the children saw themselves and the world around them, and the supplementary information adds to the picture of these worlds. Excavating these kinds of data and considering how to manage them is a significant contemporary concern for museum professionals. Finding technical solutions to the ethical problems is essential if museum professionals and data scientists are to be able to preserve, store and manage this data and the stories it tells with discretion and respect.

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