



# MUSEUM EDUCATION FOR TODAY'S AUDIENCES

Meeting Expectations with New Models

EDITED BY JASON L. PORTER  
AND MARY KAY CUNNINGHAM

**ADVANCE PRAISE FOR  
MUSEUM EDUCATION FOR TODAY'S AUDIENCE:  
MEETING EXPECTATIONS WITH NEW MODELS**

"Jason L. Porter and Mary Kay Cunningham and their authors have done the impossible—they've captured the fast-changing museum education landscape AND projected to the future. This book's case studies demonstrate how sophisticated museum teaching has become, drawing upon audience research and learning theory without sacrificing creativity or joy. Through highly readable prose, the authors address challenges, issues, and opportunities that museums face today, offering ideas, models, and solutions to practitioners. The chapters can be read in any order; it's easy to choose because each starts with an abstract. Many end with reflections about 'what we've learned,' making reading feel like a conversation with friends." —**Cynthia Robinson**, editor-in-chief, *Journal of Museum Education*, and Tufts University Museum Studies Program Director

"An astutely curated collection of essays by a selection of profound thought leaders across the field. Filled with kernels (and entire cornfields) of wisdom and timely provocations. This is an important anthology for practitioners and leaders at all levels who seek to uplift equitable and artful informal educational practices." —**Ben Garcia**, deputy executive director and chief learning officer, Ohio History Connection

"*Museum Education for Today's Audience* is an incredible tool that goes beyond program ideas to provide insight on lessons learned by practitioners that are decentering systemic exclusion. More importantly, this book provides the spark for reflective practice to support continued innovation to meet the needs of all learners and increased self-awareness for museum educators." —**Dr. Chris Taylor**, chief inclusion officer, State of Minnesota

"Amidst an intense moment of crisis and upheaval, this practical and hope-filled collection of writings can guide museum educators—and the entire museum field—into a new future. All of the contributors to this important book make clear the vital role of museum education in leading the transformation needed right now within our institutions." —**Mike Murawski**, consultant and author of *Museums as Agents of Change: A Guide to Becoming a Changemaker*

"*Museum Education for Today's Audiences* is equal parts manifesto on the power and potential of museums who center community needs and interests, and handbook for the education staff who have championed and led this work for decades." —**Kelly McKinley**, CEO, Bay Area Discovery Museum

# **Museum Education for Today's Audiences**

## **AMERICAN ALLIANCE OF MUSEUMS**

The American Alliance of Museums has been bringing museums together since 1906, helping to develop standards and best practices, gathering and sharing knowledge, and providing advocacy on issues of concern to the entire museum community. Representing more than 35,000 individual museum professionals and volunteers, institutions, and corporate partners serving the museum field, the Alliance stands for the broad scope of the museum community.

The American Alliance of Museums' mission is to champion museums and nurture excellence in partnership with its members and allies.

Books published by AAM further the Alliance's mission to make standards and best practices for the broad museum community widely available.



**American  
Alliance of  
Museums**

# Museum Education for Today's Audiences

## MEETING EXPECTATIONS WITH NEW MODELS

EDITED BY

*Jason L. Porter and Mary Kay Cunningham*

Bib. ....  
Item..... 5  
Barcode.....  
Call no. ....  
Date .....

ROWMAN & LITTLEFIELD  
Lanham • Boulder • New York • London

Published by Rowman & Littlefield

A wholly owned subsidiary of The Rowman & Littlefield Publishing Group, Inc.

4501 Forbes Boulevard, Suite 200, Lanham, Maryland 20706

[www.rowman.com](http://www.rowman.com)

86-90 Paul Street, London EC2A 4NE

Copyright © 2022 by American Alliance of Museums

*All rights reserved.* No part of this book may be reproduced in any form or by any electronic or mechanical means, including information storage and retrieval systems, without written permission from the publisher, except by a reviewer who may quote passages in a review.

British Library Cataloguing in Publication Information Available

#### **Library of Congress Cataloging-in-Publication Data**

Names: Porter, Jason L., editor. | Cunningham, Mary Kay, editor. | American Alliance of Museums.

Title: Museum education for today's audiences : meeting expectations with new models / edited by Jason L. Porter and Mary Kay Cunningham.

Description: Lanham : Rowman & Littlefield, [2021] | Includes bibliographical references and index.

Identifiers: LCCN 2021038252 (print) | LCCN 2021038253 (ebook) | ISBN 9781538148594 (cloth) | ISBN 9781538148600 (paperback) | ISBN 9781538148617 (ebook)

Subjects: LCSH: Museums—Educational aspects. | Museums and community—United States. | Museums—Social aspects—United States. | Multicultural education.

Classification: LCC AM7 .M863 2021 (print) | LCC AM7 (ebook) | DDC 069.071—dc23

LC record available at <https://lcn.loc.gov/2021038252>

LC ebook record available at <https://lcn.loc.gov/2021038253>

To my colleagues and former colleagues. I'm certain I would never have gotten here without you.

To my partner in this endeavor, Mary Kay. It is so rare that a great idea you have with a friend actually comes to pass. I attribute this project's existence largely to your dedication, wisdom, and passion.

And to Mark, who always reminds me to lift up my sails.

Jason L. Porter

*To Jason:*

When I chose this profession I had no idea that I'd meet colleagues that would become dear friends and mentors (or, as you call them, "frien-tors"). I never imagined I would share professional interests so deeply with a colleague that I'd embark on a several year journey to create a book that elevates voices about important issues in our field.

Unfortunately, I also could not have foreseen that several members of my family would become ill and caring for them while desperately trying to sustain my own mental health during a global pandemic would profoundly impact my capacity to equitably share the work of shepherding this book across the finish line.

Luckily, there is one thing I do know: Having a friend and colleague like you is a gift beyond measure. This book may have been inspired by our shared passion and vision, but it was your determination and extraordinary commitment that has made it a reality. It is hard to know if a book can change the field, but people like you most certainly do.

Mary Kay Cunningham

# Contents

Preface	xi
Acknowledgments	xvii
Introduction: Practicing Resilience in Moments of Change <i>Dina Bailey</i>	xix

## Part I—Changing Expectations of Visitors: Inclusion, Participation, Technology

<b>Chapter 1</b>	<b>Building Community and Structural Competency Through Art: An Art Museum and Psychiatry Partnership</b>	3
	<i>Enrico G. Castillo, Hallie Scott, and Theresa Sotto</i>	
<b>Chapter 2</b>	<b>Shared Authority: School and Museum Partnerships for the Twenty-First Century</b>	27
	<i>Veronica Alvarez, Elizabeth Gerber, Sarah Jencks, and Catherine Awsumb Nelson</i>	
<b>Chapter 3</b>	<b>The Spectrum Project: Social Stories, Museum Educators, and Young Adults with Autism</b>	45
	<i>Beth Redmond-Jones</i>	
<b>Chapter 4</b>	<b>Digital Decisions to Evolve, Change, and Adapt</b>	61
	<i>Mark D. Osterman</i>	

## Part II—Training and Educator Preparation

<b>Chapter 5</b>	<b>Training for the Rainbow: Preparing Educators to be LGBTQ-Inclusive</b>	77
	<i>Mac Buff</i>	
<b>Chapter 6</b>	<b>Building a Better World: Rethinking a Museum's Civic Engagement Model</b>	95
	<i>Anna Schwarz and Rachel Stark</i>	
<b>Chapter 7</b>	<b>Facilitating Family Learning in Museums: Rethinking our Assumptions and Approaches</b>	105
	<i>Scott Pattison and Smirla Ramos-Montanez</i>	

<b>Chapter 8</b>	<b>Museum Studies Programs: A Conversation about the Future</b> <i>Jason Porter and Mary Kay Cunningham</i>	127
<b>Chapter 9</b>	<b>Creating Empowered Educators</b> <i>Lorie Millward</i>	135
<b>Chapter 10</b>	<b>Cultivating a New Mindset for Professional Development</b> <i>Beth Maloney</i>	153
 <b>Part III—New Models, Anticipating the Future</b>		
<b>Chapter 11</b>	<b>Building Bridges: The Need for Cultural Competence in the Museum Field</b> <i>Teresa Williams Valencia</i>	169
<b>Chapter 12</b>	<b>The New Children's Museum: Innovating Ways to Support Today's Children</b> <i>Tomoko Kuta</i>	185
<b>Chapter 13</b>	<b>Human-Centered Improvement in Learning Institutions</b> <i>Julie Smith</i>	201
<b>Chapter 14</b>	<b>The Brain Science of Museum Learning</b> <i>Jayatri Das and Mickey Maley</i>	213
<b>Chapter 15</b>	<b>No Longer Business as Usual: Reconstructing Relevancy through Critical Race Theory</b> <i>Melanie Adams and Kayleigh Bryant-Greenwell</i>	229
<b>Chapter 16</b>	<b>The Impact of COVID-19 on the Field of Museum Education</b> <i>Juline Chevalier</i>	245
<b>Chapter 17</b>	<b>The Power of Proximity</b> <i>Lauren Zalut and Sean Kelley</i>	263
	Index	277
	About the Editors and Contributors	283

# Preface

This book is not exactly the book we set out to write. When we pitched this project in the fall of 2019—a book for practitioners that would provide practical tools and strategies for meeting the needs of twenty-first-century visitors—we didn't know anything about social distancing. We had yet to don our first N95 masks and we had yet to attend a museum program populated not by eager crowds but by faces in Zoom boxes. During the early part of 2020, we assembled a cadre of writers whose work we admired, and who were thinking in innovative and creative ways about museum education in the twenty-first century. Some were people we had worked with previously, some were people we'd seen only from afar at conferences, others were people we admired for their writing (or their Twitter posts), but whom we didn't know. Their work for which we knew them was based in museum education practice during times when groups gathered in the galleries, when students attended courses in school buildings, and when most of us commuted to offices, cubicles, and museum classrooms to do our work. Then everything changed.

## CONTEXT FOR THE BOOK

In early March of 2020, museums (and most other businesses and organizations) shut their doors, travel slowed to a standstill, and our usual interactions with visitors and with each other migrated online because of the COVID-19 pandemic. The anxiety about the moment, for reasons that included physical, financial, emotional, and other worries, rose to a collective hum that drowned out any sense of normalcy. The question of whether museums would be able to do much of the work that the authors were discussing in their proposed chapters seemed anything but certain, and we considered whether it made sense to engage in the process of writing and publishing at all.

Then in May, police officers in Minneapolis killed George Floyd, which ignited protests and amplified calls for action across the world for dismantling institutionalized racism in law enforcement, government, and other community organizations. As trusted civic institutions, many museums were called on to respond to racial injustice (by their audiences and by members of their staff). How to address equity and inclusion in the field (and contribute in meaningful ways to activism and civic engagement in their regions) became an urgent topic for institutions in the field at large—for institutions from science centers to historic homes to art museums. And for many of these organizations, being closed to visitors further challenged how and in what formats they could communicate with their communities in authentic ways (and take actual steps to address systemic racism). This confluence of events in and out of the field caused us and our authors to question whether what they were originally planning to write had relevance in light of a moment that appeared as an upheaval and recalibrating of the field.

As the summer of 2020 wore on, and it became clear that the conversations about the need for change within museums would not be resolved by statements of solidarity or actions that fell well short of a true dismantling of existing power structures, the campaign for the U.S. president ramped up and brought an added level of rancor to our national discourse. Issues of importance to cultural institutions such as immigration, civil rights, and education were topics of political conversations that didn't reflect effort toward honest dialogue and solutions but instead divisive political sloganeering. This heightened environment of partisanship and uncertainty impacted many authors who, in discussion

of topics like critical race theory, civic engagement, and informed facilitation of dialogue with visitors felt like they needed to frame their chapters in somewhat different terms than they'd initially planned.

At its core, this book asserts a central tenet about the importance of museum educators, who the authors argue throughout, are best poised to meet the needs of visitors in the twenty-first century. The role of the educator (or interpreter) continues to evolve as audiences diversify, as technology becomes more central to the gallery experience and to alternative modes of content, as knowledge about how people learn—individually and in groups—shifts, and as museums embrace the role of facilitating dialogue about contemporary issues that matter to our communities. We hope that this perspective about educators doesn't come off as devaluing other aspects of museum work or as elevating educators to some vaunted place that presumes they alone can ensure that museums will thrive in the future. But as we have seen during the pandemic, museum educators are essential to maintaining connections with visitors through the programs, content development, and conversations that they uniquely have expertise in executing. We believe this connection to the public represents a core function of the museum and thus is an important area to focus on with respect to preparing museums to meet the challenges of the future. This book argues that educators, using a multiplicity of methods and approaches, will lead museums into the future.

Museum education can often be a challenging and isolating experience, and it is not uncommon for interpreters at one institution to feel disconnected from the field at large and limited in their abilities to explore new ways of approaching their work, to keep up-to-date on issues and practices across the field, and to follow the latest research and academic study. Our hope is that museum educators, managers, academics, museum studies and informal education students, and those interested in strategies for working with visitors at diverse institutional types will find this collection of ideas and strategies useful to their work.

Although there have been other books that discuss the methods and the philosophical underpinnings of museum education, none of those have been written to specifically address the changing nature of audiences in the twenty-first century and the ways in which museum interpretation can further the issues the field is grappling with: access, equity, adaptive technology, decolonization, diversified visitorship, and civic participation. This book will dive deeply into many of the most urgent issues facing twenty-first-century educators and provide ideas, strategies, and models to transform practice.

## HOW THE BOOK IS ORGANIZED

When we thought about the most useful way to structure this book, given that we wanted it to be as useful as possible to practitioners, we thought in terms of storytelling, something familiar to us as educators and museum interpreters. In the first part of this book's story, we invited authors to discuss who museum visitors are in the twenty-first century, what they expect from museum experiences, and how interactions with educators are evolving based on their needs and curiosities. This section, titled "Changing Expectations of Visitors: Inclusion, Participation, Technology," serves as the first act of the story, a setting of the scene and establishing of characters. This section opens with a case study, written by Enrico G. Castillo, Hallie Scott, and Theresa Sotto, about a partnership between an art museum and a medical school training for psychiatric students that uses museum education techniques to discuss bias and cultural competency in the medical field. The next chapter, written by Veronica Alvarez, Elizabeth Gerber, Sarah Jencks, and Catherine Awsumb Nelson, shares two ambitious case studies that respond to changing needs of the student and teacher audience. They discuss a gallery space operated and utilized by a museum and its staff of educators in conjunction with a local public school and an in-depth program for teachers focused on oratory at a historic theater. These chapters provide ideas for embedding museum practice in work with audiences and argue for a shift in thinking from the perspective that museum experiences are enrichment to encouraging a long-term investment in transformation and deep learning with audiences.

This section continues with Beth Redmond-Jones discussing an innovative partnership between a group of young adults on the ASD spectrum who worked with museums in Balboa Park, San Diego, to create “social stories” that were used by other visitors with sensory needs to help support their visits. This type of innovative “shared authority” provides a model for working collaboratively with audiences that have typically been left out of partnerships that specifically address the needs of visitors with sensory disabilities. The final chapter in this section of the book, written by Mark Osterman, provides a rationale and lays out a step-by-step approach to creating dynamic and effective digital learning plans for museums, something that has become essential during the pandemic.

The second section of the book, titled “Training and Educator Preparation,” addresses the middle of the story, where a lot of the action of readying educators to work with audiences takes place. In this section, written by Mac Buff, we begin with a discussion of the needs of LGBTIA+ visitors (and staff and volunteers) and how museums can best prepare their education teams to work inclusively with members of a community that have often felt erased or ignored by museums. The second chapter, by Anna Schwarz and Rachel Stark, is a case study of one museum’s approach to adapt one of its core in-person school programs to virtual during the pandemic and the ways in which their educators took advantage of the otherwise challenging circumstances to expand and broaden civic engagement. The next chapter addresses the particular needs of family audiences. Scott Pattison and Smirla Ramos-Montanez use the research they conducted at a science center to discuss the unique approaches to facilitation that museum educators can take to effectively work with groups of diverse learners. To address educator preparation, the next chapter looks at the current state of academic preparation through conversations with active faculty and administrators of museum studies graduate and certificate programs. The fifth chapter in this section, by Lorie Millward, presents an innovative approach to the structure of education and interpretive departments, arguing that through new structures, we can provide educators with the pedagogy, training, and autonomy that are key to effective visitor learning. And in the final chapter in this section, Beth Maloney breaks the notion of professional development for museum educators wide open with a new model for thinking about skill building, networking, and mentorship, and expanding the perspectives of education staff.

For the third section of the book, the part of the story in which we look to the future, we wanted to present a number of ideas that would push conversations about museum education into new and unexpected places. These chapters, in a section titled “New Models, Anticipating the Future,” suggest new ways to think about the practice of museum education, suggesting how museums can shift structurally and philosophically to new expectations of visitors, new challenges to the old ways museums do things, and to our latest understanding of how people learn. The first in this section, by Teresa Valencia, argues that museum educators need to have fluency with cultural competency to undo decades of structural racism in museums. She provides foundational research on culturally competent practice as well as suggestions for creating training programs and resources for museum educators. The next chapter looks at children’s learning in museums with a particular focus on play-based, self-directed learning. This case study by Tomoko Kuta, explores how a children’s museum collaborates with artists on installations that position educators as facilitators of the self-directed learning experiences of young visitors and their families. The third chapter by Julie Smith applies a systems thinking approach to educational design and suggests ways to improve the way educators solve structural problems as a pathway to improving visitor learning.

One often overlooked aspect of museum education is brain science. When was the last time you considered what happens in the brain as you planned an educational museum experience? Jayatri Das and Mickey Mailey explain the way learning happens in the brain, dispel myths and misconceptions about cognitive science, and suggest ways in which museum experiences can be crafted to get synapses firing, engage memory-making centers, and balance sensory stimulation for visitors. The next chapter, by Melanie Adams and Kayleigh Bryant-Greenwell, presents ideas for transformative museum work by applying the practice of Critical Race Theory. It provides a case study of one museum that has

---

# Acknowledgements

---

I acknowledge and recognise the Wurundjeri, Ngunnawal, and Ngambri peoples, the owners of the lands on which this book was written. These lands were never ceded, these relationships never broken. Always was, always will be, Aboriginal land.

I also acknowledge and pay my respects to Aboriginal and Torres Strait Islander peoples throughout the regions known as Australia and the Torres Strait. Their tangible and intangible cultural heritage has been collected, appropriated, or stolen by museums and collectors for more than two centuries. Some of that heritage is featured in this thesis. In particular, I acknowledge the Kuuku-ya'u and Lama Lama peoples of eastern Cape York Peninsula in northern Queensland whose ancestors made the *kopoi* (dugong rope and harpoons) and other items which feature in Chapter Four. Thank you to Elaine Liddy and Gavin Bassani for confirming the permissions surrounding Lama Lama artefacts.

I am indebted to the cross-disciplinary expertise of Professor Kate Darian-Smith, Dr Richard Gillespie, and Associate Professor Gavan McCarthy who supervised the thesis on which this book was based, and to the McCoy Project and McCoy PhD Scholarship which funded that research. Special thanks also go to a long list of people who shared their time, knowledge, and insights along the way, including: Lindy Allen, Elizabeth Bonshek, Belinda Borg, Rebecca Carland, Matthew Churchward, Richard Gillespie, Forbes Hawkins, Nicole Kearney, Nancy Ladas, Deborah Tout-Smith, and Elycia Wallis (Museums Victoria); Vanessa Finney and Nathan Sentance (Australian Museum); Paul Wilson (Museum of Applied Arts and Sciences); Kirsten Thorpe and Lauren Booker (University of Technology, Sydney); Effie Kapsalis, Tammy Peters, Lesley Parilla, Meghan Ferriter, Robert Horton, and Jeff Smith (Smithsonian Institution); Tad Bennicoff and the archivists at the Smithsonian Institution Archives; Chris Naylor and Greg Bradsher (National Archives and Records Administration); Catherine Devine, Matthew Tarr, Paul Beelitz and the Department of Anthropology, Thomas Trombone, Iris Lee, and Rebecca Morgan (American Museum of Natural History); David Newbury, Elizabeth

Tufts-Brown and Travis Snyder (Carnegie Museum of Art); Christopher Marsden (Victoria and Albert Archives); Danny Birchall, Jennifer Phillips-Bacher, and Alexandra Everleigh (Wellcome Collection and Wellcome Trust); Hannah Barton, Jane Bramwell, Adrian Glew, Anna Henry, and Alison Foster (Tate Britain); and Virginia Smithson (British Museum).

My work owes a particular debt to the University of Melbourne's eScholarship Research Centre (ESRC). For over 35 years the Centre and its predecessor organisations were responsible for a wide range of innovative, important, and socially conscious projects, many of which were founded in relational archival informatics. Though during the course of preparing this book the centre was sadly disestablished, I hope that the many scholarly, community, and personal relationships fostered by the ESRC and its work continue. Particular thanks go to Rachel Tropea, whose offer of a job at the Centre started a journey which has culminated in the publication of this book. Your friendship, support, and experience shared over many years and many involved conversations means a great deal.

Along the way Rebe Taylor and Deb Verhoeven have been colleagues, mentors, sources of wisdom, and friends. Thank you for all of your advice, your belief in my work, and for your research, engaging writing, and passionate perspectives on the world. Without your ideas, inspiration, and encouragement my work would not be what it is today.

To my parents for your love and support as I have followed many a winding trail leading to this point, thank you.

Finally, to Bethany who has been there on this shared journey, and to Imogen who has joined us along the way. Here's to many more adventures together.

---

# Introduction

---

I walked into the Great Court of the British Museum, the Autumn sun shining through the curved glass and steel roof. Its 3,312 unique panes cast a geometric meshwork of triangular shadows, linking the façade of the circular Reading Room with the stone floor below. Though keen to explore the many thousands of artefacts on display, the main purpose of my visit was a letter. Announcing myself to the information desk, I was escorted through a door, along corridors, and up staircases to the Prehistory and Europe Study Room, a scholarly space of shelves and dark wood. Staff checked my photo identification, asked me to sign in, and showed me to a table. Then they brought over the two items I had ordered in advance: a large bound volume of outbound correspondence, and a small archives box containing loose inbound letters. I drew a bundle of papers from the box and turned over each page until I arrived at one from the Reverend Christopher George Wilkinson, dated 18 April 1901.

This was the document I had come to see. Wilkinson, a school principal in the northern Tasmanian town of Launceston, was one of the vast networks of amateur and professional collectors and scholars who wrote to the museum from all over the world. He had spent his vacation and a subsequent weekend searching encampments around Port Sorrell for Aboriginal stone tools, and in April 1901 he packaged up 26 for the museum. Wilkinson's letter, which was sent separately, is over 1,250 words long. Its contents include descriptions of his collecting expeditions, analysis of the marks found on the 'kidney-shaped' stones sent to the museum, discussion of Henry Ling Roth's work on the Aborigines of Tasmania, references to related artefacts sent to other collections, and a final note confirming that the implements would be transported 'direct to London by the apple boats which call in Hobart.'<sup>1</sup>

Charles H. Read, renowned curator and Keeper of British and Medieval Antiquities and Ethnography, replied. 'I am greatly indebted to you for your long letter of the 18th of April, which has interested me very much,' Read wrote. 'I hope to receive in a short time the box of implements, when I will examine them with your letter at hand, and write you what I think.'<sup>2</sup> Read appreciated the importance of viewing the stones with the letter. When brought

together, they tell a story rich with historical, ethnographic, and cultural context, providing insight into contemporary debates about Aboriginal people and their technologies, and offering a glimpse into the ways in which existing supply chains were used to facilitate a global trade in artefacts. One wonders what else travelled between the colonies and the metropole on boats laden with fruit.

The following book is inspired by these rich relationships between artefacts and archives. People who work with collections are continually identifying and following similar connections as part of their work. But, though today we view artefacts and archives as inherently relational, their documentation often remains discrete and disconnected, with internal databases and online collections sites reflecting the legacy of complex organisational, disciplinary, professional, and technological divisions. Through a critical interrogation of the history of museums, archives, and documentation systems we can reconceptualise contemporary practice, joining up institutional silos to more effectively capture and provide access to the complex webs of meaning which weave together the artefacts and archives of the relational museum.

Unlike Read, I did not have Wilkinson's stones at hand when I read his letter at the British Museum in 2014. Though the record remains in the archives of the department that received it, the artefacts were moved when the institution restructured and are now in the Department of Africa, Oceania, and the Americas. I planned to return to the British Museum while writing this book, and hoped that while I was there I could arrange to see some of the implements Wilkinson sent. But on 11 March 2020, with the numbers of Coronavirus cases increasing exponentially, the World Health Organization declared a pandemic and museums began to shut their doors. The British Museum remained closed for 163 days—the longest peacetime closure in their history—and when the exhibition spaces reopened to the public in August 2020, study rooms like the one I visited in 2014 remained inaccessible.

As Coronavirus spread with startling rapidity through our hyperconnected world, institutions looked to digital technologies to fill the gap. The *Wall Street Journal* reported that the pandemic was pushing museums 'deeper into the digital age,'<sup>3</sup> with many keen to emphasise that they were still open for business. Sir Ian Blatchford, Director of the UK's Science Museum Group, assured people: 'While our doors will be closed for a while, our collection—and the inspirational stories it contains—will remain open to you online'<sup>4</sup>; and Museums Victoria reminded website visitors that for them 'a world of museum experiences' was 'always open.'<sup>5</sup> Despite the scramble to launch virtual tours and interactive experiences,<sup>6</sup> most large museums had been investing in digital programs in some form or another for decades. The first experiments in automating collections documentation took place nearly 60 years ago, followed by the first conference on 'Computers and their potential applications in museums,' held in New York in 1968.<sup>7</sup> When the Smithsonian closed on 14 March 2020 their website was only a few weeks shy of its 25th anniversary,<sup>8</sup> and, at the British Museum, the 33.6 million annual visitors to its

websites outnumbered physical visitors five to one even before their monumental Bloomsbury building shut its doors.<sup>9</sup>

The stone tools sent by Wilkinson in 1901 are among the two million records accessible via the British Museum's 'Collection online' site, which was relaunched with a new interface during the first months of the pandemic. Though the site contains many beautiful images, and some artefacts have detailed descriptions, there are no images available for Wilkinson's stone tools, and only minimal metadata. Taking one of the kidney-shaped stones (hammerstone, Oc1901,-.11) as an example, there is a title, a location, and a single measurement (8.60 centimetres), with a link to a short authority record about Wilkinson himself.<sup>10</sup> There is no mention of any related correspondence, or of the Indigenous people who made and used the tools. All of which is not to criticise the museum for how much they know. Though it may come as a shock to some users, no one who has worked in and around galleries, libraries, archives, and museums (the GLAM sector) will be surprised by the fact that there are often many things in our collections about which we know very little.

But much of what we do know remains hard to discover. When I visited the Prehistory and Europe Study Room in 2014, it was to follow up on information provided to me by a colleague, Rebe Taylor, who has spent many years researching collectors of stone tools from Tasmania. She provided me with a document containing her research notes, including transcriptions of the letters from Wilkinson and Read, and references to the relevant items from the British Museum's catalogue. Previously Taylor had provided the same document to the museum, and I discussed it with the staff there on my visit. More than a century after Read noted the importance of viewing the Wilkinson artefacts with the letter at hand, Taylor re-established the link and I followed her trail. Yet, though there is clear evidence some details have been updated,<sup>11</sup> none of this information is visible online, or in the museum's internal catalogue. Anyone who comes across these stone implements today needs to work out for themselves that the correspondence files are now in a separate department from the stones, request the relevant items from the archives, and (if the study room is open) go through the same journey I undertook. What is more, unless they have spoken to the 'right' person they must do so without knowing in advance that there is anything to find. Or they will see a sparse entry for a discrete object and move on, unaware that elsewhere in the museum Wilkinson's richly-detailed letter has been carefully preserved.

## **Reticent objects**

Though the scope, scale, and purpose of museums and archives have evolved substantially in the modern era (see Chapter One), the idea that objects are reticent,<sup>12</sup> communicating little beyond their visible material or textual

properties, has been around longer than most public collecting institutions. When bookseller William Hutton travelled to London in 1784 his excitement at visiting the British Museum soon turned to disappointment. 'If I see wonders which I do not understand, they are no wonders to me,' Hutton wrote. 'The history and the object must go together, if one is wanting, the other is of little value. I considered myself in the midst of a rich entertainment, consisting of ten thousand rarities, but like Tantalus I could not taste one.'<sup>13</sup>

By the end of the nineteenth century there was widespread recognition in the English-speaking world that the 'museum experience' required access to documentation and context as much as to artefacts and specimens. Publisher and library advocate Thomas Greenwood saw this as the key to educating museum visitors, as well as to supporting 'the special studies of the few.'<sup>14</sup> Greenwood's contemporaries George Brown Goode (Assistant Secretary at the Smithsonian) and Sir William Henry Flower (Director of the Natural History Museum, London) went so far as to argue that specimens should be selected to illustrate collections of instructive labels.<sup>15</sup> Visitors were also asking for more context, as at the University of Oxford's Pitt Rivers Museum in the late nineteenth century, where Henry Balfour worked to update their displays:

Sketches, photographs, maps and diagrams were incorporated into the display in order to increase the educational value of the series exhibited and in order to 'explain the nature of the exhibited specimens' to the more general public. That the demand for such information came from the Museum's visitors themselves is evinced through their criticism of its overdependence on the presence of an 'expert' [...] to render the collection pleasurable and instructive.<sup>16</sup>

Hutton had reached a similar conclusion, vowing not to return to the British Museum 'till some kind friend will instruct me, or put a book into my hand, that I may instruct myself.'<sup>17</sup>

However, these early efforts also reveal much about the prevailing social attitudes and underlying power structures of the time. Greenwood saw museums as an opportunity to elevate the character of visitors, while the first secretary of the Smithsonian, Joseph Henry, viewed interconnected knowledge as the province of educated liberal minds:

James Smithson was well aware that knowledge should not be viewed as existing in isolated parts, but as a whole, each portion of which throws light on all the other, and that the tendency of all is to improve the human mind, and give it new sources of power and enjoyment ... narrow minds think nothing of importance but their own favourite pursuit, but liberal views exclude no branch of science or literature, for they all contribute to sweeten, to adorn, and to embellish life.<sup>18</sup>

Museums and their (primarily white, male) scholars were authorities whose expertise placed them above the narrow-minded masses. The pursuit of a singular, universal concept of knowledge—a ‘whole’—was founded in a positivist belief that detached, objective observation was not only possible, but the only way to access truth. The results were then captured and categorised using mono-hierarchical classification structures, and shaped into public displays that purported to be neutral and natural,<sup>19</sup> suppressing the heterogeneous complexity of cultural, social, and scientific systems.<sup>20</sup> Such ideas remained current well into the twentieth century. When the Museum of History and Technology opened on the National Mall in Washington, DC, in 1964 Henry’s quote was carved on the façade.

### Collections data

Writing in the 1880s, Greenwood already recognised that the scale of museum holdings created a challenge for enlightenment, education, and understanding. ‘It may be gravely questioned,’ he wrote, ‘whether any mind has carried away many useful impressions from the infinite multitude upon which he has had an opportunity of looking.’<sup>21</sup> In the decades since collections have continued to expand at a rapid rate, with more than 120 million items now held in the 17 English national museums (including the British Museum), and over 155 million in the Smithsonian museums.<sup>22</sup> As for online collections, the Smithsonian boasts of over 33 million digital object and specimen records, and digital records for 127 thousand cubic feet of archives and 1.5 million library volumes, while large aggregators like Europeana (over 51 million items) and the National Library of Australia’s Trove (over 450 million items) continue to grow.

Even as the first museum websites started to go live some were already wary of unchecked proliferation. Paul Saffo suggested in 1994 that context would quickly become more important than content, and former Deputy Director of the Smithsonian’s Office of Information Resources Management, David Bearman, recognised that most users were interested less in searching for ‘things,’ and more in ‘what they can do with “things” (entities) and what relationships “things” have to each other.’<sup>23</sup> In a 1995 editorial titled ‘It’s Happening—Now What?’ Bearman wrote:

None of us can keep up with the wealth of new material becoming available in digital form; we cannot even identify it. The challenge is not simply to encourage more data capture but to make sense of the burgeoning data and to link them in meaningful ways into information resources that can be used by specialists and laypeople alike. And here we feel like we’re losing.

Kevin Donovan addressed the challenge at the first Museums and the Web conference (Los Angeles, 1997), arguing that two decades of investment in

automation had produced ‘better looking documents and spreadsheets and more accurate lists’ without actually improving access to *knowledge*: ‘In and of itself access to much of our on-line sources is of little value because museums add so little value to the data they provide.’<sup>24</sup> In his perceptive analysis Donovan criticised museums for their object-centric approach, the unnecessary perpetuation of existing institutional divisions, and the ‘frightful blank search field method of providing access to data.’<sup>25</sup> The alternative he proposed emphasised context and history:

Instead of leading with the object, lead with the story of the culture, historical context, important people and places, and their importance. Tell engaging stories with objects woven through them. Do so via entertaining, prescribed paths that both lead the user lightly by the hand and encourage curiosity, exploration and serendipity.<sup>26</sup>

Museums already produce this sort of content for exhibitions, wall labels, publications, research projects, marketing materials, and educational resources, but rather than saving and managing it in collections management systems the results often end up in distributed files and research notes, disconnected databases, and local storage systems. ‘Enormous financial and human resources are invested in creating this content,’ Donovan writes, ‘but the results are “one-off”, an unmanaged asset that is largely unavailable for reuse. Imagine the value of accumulating this content over several years and being able to repurpose it on-line.’<sup>27</sup>

There is little evidence that Donovan’s vision of a move from collections management towards more relational content management has been adopted. Though some institutions have started to develop more generous interfaces,<sup>28</sup> many online collections sites are still built around search boxes, producing a static list or grid of object records. Internal divisions also continue to shape the user experience. The American Museum of Natural History requires a choice between eight different collections databases maintained by separate areas, and London’s Victoria & Albert (V&A) asks online visitors to their collections search: ‘Or are you looking for Search the Archives?’<sup>29</sup> Clay Shirky wrote in 2005:

People have been freaking out about the virtuality of data for decades, and you’d think we’d have internalized the obvious truth: there is no shelf. In the digital world, there is no physical constraint that’s forcing this kind of organization on us any longer. We can do without it, and you’d think we’d have learned that lesson by now.

And yet.<sup>30</sup>

And yet the physical and administrative location of items continue to shape how we access digital information.

Saffo, Bearman, Donovan, and others recognised that turning accumulations of discrete object records into museum stories and experiences requires more than expanded metadata and high-quality digitisation. Objects need to be linked to their context, to knowledge about people, communities, expeditions, and events; they need to be connected through the knowledge of curators and the voices of communities. Where that information has been captured, it is often found in the archives—the documents, notebooks, correspondence, photographs, files, and other material seen as distinct from ‘the collection’—as well as in distributed staff records, and in publications. Together these elements form a broader conceptual archive, defined by Michel Foucault as:

that which determines that all these things said do not accumulate endlessly in an amorphous mass, nor are they inscribed in an unbroken linearity, nor do they disappear at the mercy of chance external accidents; but they are grouped together in distinct figures, composed together in accordance with multiple relations.<sup>31</sup>

If effectively documented, this relational archive can better support the retrieval and understanding of collections, the preservation of knowledge about artefacts and specimens, the development of exhibitions and exhibition content, and the creation of rich interfaces that provide new ways of navigating and exploring the stories that run through collections. Furthermore, a relational approach to collections and their documentation promises to more accurately reflect the ways in which practitioners already understand and work with collections in contemporary museums.

### **Relational museums, relational archives, relational technologies**

The nineteenth-century idea of universal systems of knowledge and authoritative, objective institutions persisted well into the twentieth century. Then, from the 1960s, attitudes started to shift. In 1967 Marshall McLuhan and his collaborator Harley Parker held a seminar at the Museum of the City of New York, where they argued strongly for placing museum objects in social and cultural contexts, favouring audience participation and multiple perspectives over the imposition of a single, linear narrative.<sup>32</sup> The following decade International Council of Museums (ICOM) meeting delegates from Benin questioned the utility and worth of museums in contemporary life, leading to a meeting of Latin American experts in 1972 who concluded that societal issues required broad, socially engaged, cross-disciplinary approaches from a range of organisations, including museums.<sup>33</sup> Rather than accepting the museum as ‘temple’—characterised by Duncan Cameron as a place of fixity and stasis ‘where the victors

rest<sup>34</sup>—the ICOM and Latin American events saw professionals questioning the orthodoxy of institutions long associated with colonial power.<sup>35</sup> The ‘new museology’ of the 1980s continued this trend, embracing cultural and theoretical shifts in the politics of representation through explicit recognition that knowledge and values are contingent rather than part of a universal whole.<sup>36</sup> Broadly speaking, new museology focused less on the administrative processes and professional practices found in museums, and more on the place of museums in society, the historically-specific nature of museum knowledge, and the multiplicity of social, cultural, and political environments which shape our understanding of objects.<sup>37</sup> If objects themselves are taken as mute, meaning is contextual (that is, relational) rather than inherent or fixed.<sup>38</sup> As context changes the meaning and significance of artefacts is also transformed.

The results of this work are clearly visible today. We see it in the use of parallel perspectives at the National Museum of the American Indian, and the Wellcome Collection’s participatory Reading Room;<sup>39</sup> in the shift from the British Museum’s *A History of the World in 100 Objects* to the more recent *100 Histories of 100 Worlds in 1 Object*;<sup>40</sup> in the Australian Museum, where wall text recognises that ‘every object is part of an entangled relationship between people, nature and culture,’<sup>41</sup> and in the Western Australian Museum Boola Bardip where “‘living stories” are weaved through’ the museum, including the use of ‘two-eyed seeing’ which treats western and Indigenous knowledge as equivalent.<sup>42</sup> Elsewhere there have been ongoing discussions about the networked museum, and research projects focused on exchange networks and the relational object.<sup>43</sup>

Together these developments are broadly encapsulated by the concept of the ‘relational museum.’ As explained by museologist and museum planner Duncan Grewcock:

for some time now the academy and the museums profession have been coming to terms with new ways of thinking and representing a more complex, partial, processual world of connections, a world that does not sit so easily within these modernist regimes of classification (if it truly ever did). Recognising and working with a partial and shifting understanding of the world informs the emergence of what one can term ‘the relational museum.’ The relational museum emerges through varying attempts to re-image the contemporary museum as connected, plural, distributed, multi-vocal, affective, material, embodied, experiential, political, performative and participatory.<sup>44</sup>

In 2019 the International Council of Museums proposed a new definition for museums which echoed many of these ideas, referring to ‘democratising, inclusive and polyphonic spaces’ responsible for safeguarding ‘diverse memories’ through ‘participatory and transparent’ practice.<sup>45</sup> Though not

without controversy, the proposed change demonstrates the pervasiveness of the relational museum concept.

Contemporary archival practice is also built on a long tradition of relational thinking. Terry Eastwood has traced the earliest conception of the 'system of interrelated documents' known as an 'archival fonds' back to late eighteenth-century Denmark.<sup>46</sup> These ideas were formalised in the 1898 *Manual for the arrangement and description of archives* (the 'Dutch Manual'), widely considered the first comprehensive guide to managing and documenting archives. The Dutch Manual refers to 'the structure of the collections and the relations existing between its parts,' cautions against destroying 'the natural relation of the documents,' and argues that it is only through knowing 'all the documents externally and internally and in their mutual relations' that the archivist can prepare a definitive inventory.<sup>47</sup> Operating at a different scale to Henry's concept of unified knowledge, many focused on internal relationships rather than connections to broader fields of knowledge, treating archives as an organic 'whole' in and of themselves.<sup>48</sup>

Though this idea persists, recent archival practice has worked to formalise and broaden the relational aspects of documentary collections. National and international archival standards are constructed around the use of relationships between descriptive elements, and between descriptive elements and separate authority records for people, organisations, and other entities.<sup>49</sup> Theoretical explorations of parallel and societal provenance recognise the complexity of organisational and social relationships,<sup>50</sup> while practical developments such as the archival software Mukurtu capture multiple perspectives and voices by incorporating Indigenous and community knowledge as well as standards-based archival description and metadata.<sup>51</sup> Others have pushed these ideas further, exploring the place of records in social networks and contextual information frameworks.<sup>52</sup> Like ICOM, the International Council on Archives (ICA) has started to emphasise these moves towards diversity and polyphony. In Tandanya—The Adelaide Declaration, the ICA calls for the decolonisation of archival principles, the incorporation of Indigenous knowledge methods, and 'new dynamics of spirituality, ecology and Indigenous philosophy in to the European traditions of archival memory [...] The result will be a new model of public archives as an ethical space of encounter, respect, negotiation and collaboration without the dominance or judgement of distant and enveloping authority.'<sup>53</sup>

Woven through the development of the relational museum and relational archives runs a third strand: relational technology. The potential role of automation in capturing and navigating relationships between collected items goes back at least as far as Vannevar Bush, who outlined his idea for a 'memex' in 1945.<sup>54</sup> The machine could store books, records, and communications which the user could search, connecting relevant items together into 'trails' which functioned as a means for storing and accessing knowledge, not (just) about individual things, but about topics built from related resources.

Though never built, the memex remained an influential concept. Ted Nelson, who developed the idea of hypertext in the 1960s, quoted Bush and conceived of his own system, Xanadu (also never built), to represent the 'interwindingness' of all things.<sup>55</sup> Later, Tim-Berners Lee referenced Bush in a 1992 article on the development of the World Wide Web,<sup>56</sup> though Nelson has since referred to Berners-Lee's invention as a dumbed-down version of earlier ideas which left out the most important part: visible connections.<sup>57</sup>

## About this book

*Artefacts, Archives, and Documentation in the Relational Museum* brings all these strands together to improve our understanding of current practice, and provide a foundation for future developments. My interest in this area started with my work as an archivist and researcher, collaborating on numerous archival and public history projects which used digital technologies to make distributed collections-based knowledge more discoverable and accessible for researchers and communities. I became increasingly interested in the treatment of archives in museums, and broader issues related to collections management and documentation, leading to the doctoral research project on which the book is based. During this time I met museum staff who struggled to uncover what their predecessors knew about collections, community members frustrated by their inability to find or access the field notes related to artefacts collected from their ancestors, and curators who were unable to retrace their steps when searching for a letter that provided key contextual information about a collection item. In the chapters that follow I explore these sorts of issues through a series of histories and case studies, each focusing on a particular strand.

The separation of artefacts and archival material as seen on websites like the V&A's collection search is not just a product of separate databases. These divisions reflect long-running processes of professionalisation and practice change. Chapter One provides an overview of the history of museums and the archival profession, revealing how increased attention on archives in museums ultimately contributed to their physical and intellectual separation from other collections.

Chapter Two looks at technological change, tracing the documentation history of two firearms acquired by the Science Museum of Victoria (precursor to Museums Victoria) through index cards, print catalogues and various stages of automation and computerisation. Included is the story of the development of the collections management system EMu, now one of the most widely-used tools internationally. Together, these elements demonstrate how the constraints and possibilities of various legacy technologies continue to shape the collection description we see today.

Chapter Three examines a specific type of archival item often found in museums: field books. These individual, sometimes idiosyncratic, records

are used by anthropologists, natural scientists, and expedition leaders to describe and document their work in the field, providing evidence vital to the identification and understanding of many artefacts and specimens found in museums. Drawing on concepts from the field of preventive conservation, the chapter looks at how more integrated approaches to archival records can help reduce the risks of dissociation.

Chapter Four explores the internationally-recognised Donald Thomson Collection, which includes artefacts, natural history specimens, extensive field notes, photographs, publications, and audio-visual material. Looking at the story of the Thomson Collection and its documentation in the context of broader changes in museums helps to reveal how systems and processes have failed to keep pace with our understanding of artefacts and collections, or the needs of communities.

Chapter Five looks at how we conceptualise collections and their documentation. Moving beyond hierarchical structures like the ‘tree of knowledge’ and the clean lines of networks, the chapter focuses on alternative models drawn from ecology, anthropology, and Indigenous studies, including coral reefs, trails, and weaving. Combining these with contemporary theoretical and disciplinary perspectives, the chapter explores models which can help to reshape our understanding of documentation in the relational museum. The Conclusion then briefly considers what is needed to apply these models in practice.

Though the focus here is on museums and their archives, this book is not just aimed at cataloguing and collections management staff or museum archivists. Museums are an ideal case study—diverse, cross-disciplinary institutions with mixed collections and systems, aiming to preserve and communicate knowledge for a wide range of user communities—but there are broader implications here for galleries, archives, and libraries, and for anyone who creates, maintains, or works with digital and analogue collections, whether they be in community organisations, universities, the public sector, governments, or corporations. This is also not designed as a ‘how-to’ book; there is very little technical detail, and (with the exception of the Conclusion) little attempt to analyse how specific technologies can help to ‘solve’ the problems identified. All of which is by design. While communities working on standards development, linked data, and machine learning all have roles to play when thinking about implementing some of the ideas highlighted in the following chapters, there are already too many examples of projects adopting specific technologies or tools and attempting to apply them without first developing a full understanding of the problem being tackled. As Bearman wrote in 1985: ‘The actual information which is the object of our information management effort is too often neglected in the process of discussing how best to manage resources devoted to its creation, storage, retrieval and distribution.’<sup>58</sup> At its core this is a book about the actual information, the concepts that underpin past and present museum documentation, the ways in which things<sup>59</sup> interrelate, and the ways in which we capture and navigate knowledge. These ideas affect the ways in which information can be

preserved, discovered, retrieved, understood, and used in our societies, with wide-reaching consequences.

I visited more than 60 museums during my research, most of them in three countries—Australia, the United States, and England—and all the major case studies used are drawn from these experiences. Exploring the history and current practice of these institutions involved a combination of archival research, recorded interviews, meetings with staff, site visits (including demonstrations of collections management systems), and extensive surveys of public websites and secondary source material. The primary case study used throughout is Museums Victoria (MV). One of the most significant museum organisations in Australia, MV is an ideal institution to address the themes explored in this book, with diverse collections spanning natural and social history, Indigenous cultures, anthropology, and technology, supplemented by strong exhibitions, an established archival program, and a pivotal role in the development of collections management technologies in Australia and internationally. An appointment as a Research Associate at MV also provided an invaluable opportunity to delve into the complex history of a large institution over an extended period of time. The Smithsonian and the British Museum were selected for their prominence and widespread influence, which reaches far beyond their local contexts, while other institutions were included for their ability to bring key themes into focus. For example, New York's American Museum of Natural History (AMNH) has been involved in field book digitisation projects, the Anthropology Department has developed database technology which incorporates digitised archival records in a very visible way, and the library has undertaken experiments with archival standards as part of efforts to more effectively link up different organisational collections. In recent years the Tate (London) and the Carnegie Museum of Art (Pittsburgh) have been moving towards more integrated presentation of their artefactual and archival collections online, while the Victoria and Albert Museum (V&A) has a well-established archive, and was directly involved in convergence research in the late 2000s.

Feedback received at a number of international conferences suggests the findings presented here are relevant to many large museums around the world. However, the case studies featured are necessarily constrained; they are not universal, and there may well be museums and archives with less international profile that have made more progress than those featured. Large GLAM institutions can have their own gravity and inertia which favours particular types of collaborations, technologies, and processes, just as small and medium institutions with fewer resources and multidisciplinary staff can develop alternative, inventive approaches to areas like collections management and documentation based more on local user requirements than vendor products. Additional research is also required into how different perspectives and traditions in places like Europe and Scandinavia, Asia, Africa, and the Middle East challenge the ways in which those of us working in the

Anglosphere conceptualise artefacts, archives, and their documentation. For example, in the first plenary session at the ICOM General Conference in Kyoto, 2019, Mamoru Mohri discussed the Japanese concept of ‘tsunagari’ (connection, link, or relationship) as seen at a range of levels, from cells and bodies to societies and the planet—a concept which resonates strongly with the ideas in this book. The lack of examples from different cultures or of different scales is the result of language, visibility, and available resources, and should not be taken as an indication that these institutions have nothing of value to contribute. In light of this, readers can only benefit from continuing to engage with diverse international networks, rather than assuming the examples employed here (many of which could be characterised as the ‘usual suspects’) tell the whole story. Likewise, the role of libraries—described by Colin Smith as a ‘third corner to the problem’<sup>60</sup> of managing artefacts and archives—and the varied needs of different types of users are only touched on briefly.<sup>61</sup> Interdisciplinary collaboration with library and information science, visitor studies, and other professions is essential if we are to overcome some of the barriers to progress that have grown and solidified over the past century or more.

Even with change, some experiences will and should remain. Documentation systems cannot capture the embodied encounter with an artefact; the tacit knowledge of makers, knowledge holders, curators, and conservators who work with material culture; the expertise of specialist researchers, curators, archivists, and librarians; or the rich stories that live in people and communities. We also need to be wary of anyone who overstates the power, scope, and scale of museums and their mission. Marisa Elena Duarte and Miranda Belarde-Lewis note that:

For non-Indigenous individuals decolonization work means stepping back from normative expectations that (1) all knowledge in the world can be represented in document form, (2) to some degree, already is, and (3) Indigenous ways of knowing belong in state-funded university and government library, archive, and museum collections, especially for the benefit of society’s privileged elite.<sup>62</sup>

Though this book is centred on the valuable knowledge contained in museum collections, archives, and similar cultural heritage institutions, it should not be taken as a call to appropriate, capture, and control access to knowledge and stories through a further extension of problematic attitudes and collecting practices. Nor will institutions ever describe and digitise all their collections and archives, or find the time and resources to update all their existing records. Online and offline collections descriptions will always be partial, and researchers will still need to visit physical museums, archives, and study rooms to search collections and uncover their own relationships. As anthropologist and museum director Nicholas Thomas

notes, some of these may be literal and straight forward, while others are latent, nebulous, hypothetical, or bewildering in their variety,<sup>63</sup> making them difficult to describe.

But the social contribution of museums will be more meaningful and multifaceted if we focus less on describing discrete objects and more on relationality. The relationship between a woven rope and the handwritten notes of the anthropologist who acquired it, revealing the personal and community relationships that brought the maker and collector together. The relationship between a firearm and the document which tells us how it was used, and what this tells us about societies, class, and conflict. Or the relationship between a stone tool held by one department and a handwritten letter held by another, revealing more about the entanglement of colonisation, science, race, and human histories. Capturing more of these trails as they are discovered will help preserve what we know, opening up new opportunities for navigating and understanding collections, and providing a richer experience for all those connected to the relational museum.

## Notes

- 1 Letter to 'sir' from C.G. Wilkinson, Church Grammar School, Launceston, April 18, 1901. Box 1999–1902 E-F. DBEPA BM.
- 2 From outletters 1901, Charles H. Read to Rev C.G. Wilkinson, May 30, 1901. DBEPA BM.
- 3 Daniel Grant, "Pandemic Pushes Museums Deeper Into Digital Age; When Covid-19 Forced Museums to Shut Their Buildings Spring, Many Created New Virtual Offerings for Visitors. That Digital Content Is Likely Here to Stay," *Wall Street Journal (Online)*, July 31, 2020, 2429048326, ProQuest One Academic, <https://search.proquest.com/docview/2429048326?accountid=8330>.
- 4 Quoted in "Tate, V&A, British Museum Temporarily Close over Coronavirus," *Bloolooop* (blog), accessed October 8, 2020, <https://bloolooop.com/news/london-museums-close-coronavirus/>.
- 5 "Museums Victoria," Museums Victoria, accessed October 8, 2020, <https://museumsvictoria.com.au/>.
- 6 Chiara Zuanni, "Digital Responses from Locked-down Museums," *Cultural Practice* (blog), June 29, 2020, <https://culturalpractice.org/digital-responses-from-locked-down-museums/>.
- 7 Metropolitan Museum of Art (New York, N.Y.), "Conference on Computers and Their Potential Application in Museums to Be Held at Metropolitan Museum of Art in April, 1968 [Press Release]" (Metropolitan Museum of Art, 1968), <http://libmma.contentdm.oclc.org/cdm/ref/collection/p16028coll12/id/1803>.
- 8 Jennifer Wright, "The Electronic Smithsonian," Smithsonian Institution Archives, May 7, 2015, <https://siarchives.si.edu/blog/electronic-smithsonian>.
- 9 The British Museum, "Report and Accounts for the Year Ended 31 March 2020" (London: The British Museum, November 24, 2020), 27, <https://www.gov.uk/government/publications/the-british-museum-annual-report-and-accounts-2019-to-2020>.

- 10 “Hammerstone,” British Museum, accessed October 9, 2020, [https://www.britishmuseum.org/collection/object/E\\_Oc1901-11](https://www.britishmuseum.org/collection/object/E_Oc1901-11).
- 11 For example, the authority record for Wilkinson now includes a reference to Taylor’s book, *Into the Heart of Tasmania: A Search for Human Antiquity* (Carlton, Victoria: Melbourne University Publishing Limited, 2017).
- 12 Peter Vergo, “The Reticent Object,” in *The New Museology*, ed. Peter Vergo (London: Reaktion Books, 1989), 41–59.
- 13 William Hutton, *A Journey from Birmingham to London* (Birmingham: Pearson and Rollason, 1785), 190.
- 14 Thomas Greenwood, *Museums and Art Galleries* (London: Routledge/Thoemmes Press, 1996), 4–5; Valerie Casey, “Staging Meaning: Performance in the Modern Museum,” *TDR (1988-)* 49, no. 3 (2005): 83.
- 15 See George Weiner, “Why Johnny Can’t Read Labels,” *Curator: The Museum Journal* 6, no. 2 (April 1, 1963): 143, <https://doi.org/10.1111/j.2151-6952.1963.tb01596.x>; Kenneth Hudson, *Museums for the 1980s: A Survey of World Trends* (London and Paris: UNESCO, Paris; and Macmillan, London, 1977), 10; Tony Bennett, *The Birth of the Museum: History, Theory, Politics*, Culture: Policy and Politics (London; New York: Routledge, 1995), 42.
- 16 Annie E. Coombes, *Reinventing Africa: Museums, Material Culture, and Popular Imagination in Late Victorian and Edwardian England* (New Haven: Yale University Press, 1994), 125–26. Coombes notes that Balfour ‘indignantly refuted’ the suggestion that there was an overdependence on his and E.B. Tylor’s expertise; the provision of additional context nevertheless proved valuable.
- 17 Hutton, *A Journey from Birmingham to London*, 197.
- 18 Joseph Henry, first secretary of the Smithsonian Institution. Quote engraved on the façade of the National Museum of American History, Washington, D.C.
- 19 Greenwood, *Museums and Art Galleries*, 181–82.
- 20 Tony Bennett, “The Exhibitionary Complex,” *New Formations*, no. 4 (Spring 1988): 73–102; Tony Bennett, “Thinking (With) Museums: From Exhibitionary Complex to Governmental Assemblage,” in *Museum Theory*, ed. Andrea Witcomb and Kylie Message, vol. 1, *The International Handbooks of Museum Studies* (Chichester, West Sussex: John Wiley & Sons Ltd, 2015), 3–20.
- 21 Greenwood, *Museums and Art Galleries*, 29.
- 22 Suzanne Keene, “Collections in the English National Museums: The Numbers,” *Papers from the Institute of Archaeology* 18, no. S1 (2007): 115–34; “National Collections,” Smithsonian Institution, 2018, <https://www.si.edu/dashboard/national-collections>.
- 23 Paul Saffo, “It’s the Context, Stupid,” *Wired*, 3 January 1994, <https://www.wired.com/1994/03/context-2/>; David Bearman, “Standards for Networked Cultural Heritage,” *Archives and Museum Informatics* 9, no. 3 (1 September 1995): 303, <https://doi.org/10.1007/BF02770469>.
- 24 Kevin Donovan, “The Best of Intentions: Public Access, the Web & the Evolution of Museum Automation,” in *Museums and the Web: An International Conference* (Museums and the Web, Los Angeles: Museums and the Web, 1997), <https://www.museumsandtheweb.com/mw97/speak/donovan.html>.
- 25 Donovan.
- 26 Donovan.
- 27 Donovan.
- 28 Mitchell Whitelaw, “Generous Interfaces for Digital Cultural Collections,” *Digital Humanities Quarterly* 9, no. 1 (2015), <http://www.digitalhumanities.org/dhq/vol/9/1/000205/000205.html>.

- 29 <https://www.amnh.org/>
- 30 Clay Shirky, "Ontology Is Overrated – Categories, Links, and Tags," Clay Shirky's Writings About the Internet, 2005, [http://shirky.com/writings/herecomeseverybody/ontology\\_overrated.html](http://shirky.com/writings/herecomeseverybody/ontology_overrated.html); see also David Weinberger, *Everything Is Miscellaneous: The Power of the New Digital Disorder*, 1st ed (New York: Times Books, 2007).
- 31 Michel Foucault, *Archaeology of Knowledge*, Routledge Classics (London; New York: Routledge, 2002), 145–46; on the distinction between archives and 'the archive,' see Michelle Caswell, "'The Archive' Is Not an Archives: On Acknowledging the Intellectual Contributions of Archival Studies," *Reconstruction* 16, no. 1 (August 4, 2016), <https://escholarship.org/uc/item/7bn4v1fk>.
- 32 Marshall McLuhan et al., *Exploration of the Ways, Means, and Values of Museum Communication with the Viewing Public. Principal Speakers: Marshall McLuhan, Harley Parker [and] Jacques Barzun*. (New York: Museum of the City of New York, 1969).
- 33 Hudson, *Museums for the 1980s*, 15.
- 34 Duncan F. Cameron, "The Museum, a Temple or the Forum," *Curator: The Museum Journal* 14, no. 1 (March 1, 1971): 11–24, <https://doi.org/10.1111/j.2151-6952.1971.tb00416.x>.
- 35 See, for example, Susan Sheets-Pyenson, *Cathedrals of Science: The Development of Colonial Natural History Museums during the Late Nineteenth Century* (Kingston, Ont: McGill-Queen's University Press, 1988).
- 36 Ivan Karp and Corinne A. Kratz, "The Interrogative Museum," in *Museum as Process: Translating Local and Global Knowledges*, ed. Raymond Aaron Silverman, Museum Meanings (London; New York: Routledge, Taylor & Francis Group, 2015), 282–83.
- 37 Peter Vergo, "Introduction," in *The New Museology*, ed. Peter Vergo (London: Reaktion Books, 1989), 1–5; Deirdre C. Stam, "The Informed Muse: The Implications of 'the New Museology' for Museum Practice," *Museum Management and Curatorship* 12, no. 3 (September 1, 1993): 268–71, [https://doi.org/10.1016/0964-7775\(93\)90071-P](https://doi.org/10.1016/0964-7775(93)90071-P); Vikki McCall and Clive Gray, "Museums and the 'New Museology': Theory, Practice and Organisational Change," *Museum Management and Curatorship* 29, no. 1 (January 1, 2014): 19–21, <https://doi.org/10.1080/09647775.2013.869852>.
- 38 Vergo, "The Reticent Object"; Tony Bennett, "The Political Rationality of the Museum," *Continuum* 3, no. 1 (January 1, 1990): 42–43, <https://doi.org/10.1080/10304319009388148>; Steven Lavine and Ivan Karp, "Introduction: Museums and Multiculturalism," in *Exhibiting Cultures: The Poetics and Politics of Museum Display*, ed. Ivan Karp and Steven Lavine (Washington: Smithsonian Institution Press, 1991), 1–9.
- 39 Anna Faherty, *Reading Room Companion: Consisting of a Rare and Valuable Collection of Diverse Curiosities Acquired by and for Henry Wellcome with a Great Variety of Books* (London: Wellcome Collection, 2014), <http://trove.nla.gov.au/version/211693484>.
- 40 "100 Histories of 100 Worlds in One Object," 100 Histories of 100 Worlds in One Object, accessed November 28, 2020, <https://100histories100worlds.org/>; for the original British Museum project, see Neil MacGregor, *A History of the World in 100 Objects* (London: Allen Lane, 2011).
- 41 Introductory wall text, *200 Treasures of the Australian Museum*, Australian Museum, Sydney, Australia. Site visit by the author, October 18, 2017.
- 42 Rosamund Brennan, "'A Conduit for Healing': Perth's \$400m Boola Bardip Is a Museum for the Post-Truth Era," *The Guardian*, November 23, 2020, <https://>

- www.theguardian.com/culture/2020/nov/23/a-conduit-for-healing-perths-400m-boola-bardip-is-a-museum-for-the-post-truth-era.
- 43 Patrick Greene, "Museum Victoria: Building the Networked Museum," *ReCollections* 1, no. 2 (September 2006), [http://recollections.nma.gov.au/issues/vol\\_1\\_no\\_2/commentary/museum\\_victoria](http://recollections.nma.gov.au/issues/vol_1_no_2/commentary/museum_victoria); Nancy Proctor, "The Museum as Distributed Network," Museum Identity Ltd, 2017, <http://www.museum-id.com/idea-detail.asp?id=337>; MCN, *MCN2016 Keynote: Catherine Bracy* (New Orleans, LA, 2016), <https://www.youtube.com/watch?v=ySJgtW-ptwE>; research projects have included the Relational Museum; The Relational Museum and its Objects; and Reconceptualising Heritage Collections—see Chris Gosden, Frances Larson, and Alison Petch, *Knowing Things: Exploring the Collections at the Pitt Rivers Museum, 1884–1945* (Oxford; New York: Oxford University Press, 2007); "Linkage Projects 2015 – Examples of Linkage Projects Commencing in 2015" (Australian Research Council, 2014), [http://www.arc.gov.au/sites/default/files/filedepot/Public/Media%20&%20Resources%20Centre/Announcement%20Kits/LP15/LP15\\_ACT\\_state\\_example\\_funded\\_grants.pdf](http://www.arc.gov.au/sites/default/files/filedepot/Public/Media%20&%20Resources%20Centre/Announcement%20Kits/LP15/LP15_ACT_state_example_funded_grants.pdf); Fiona Cameron and Sarah Mengler, "Complexity, Transdisciplinarity and Museum Collections Documentation: Emergent Metaphors for a Complex World," *Journal of Material Culture* 14, no. 2 (2009): 189–218, <https://doi-org.virtual.anu.edu.au/10.1177/1359183509103061>.
- 44 Duncan Grewcock, *Doing Museology Differently*, Routledge Research in Museum Studies 7 (New York: Routledge, 2014), 5.
- 45 "Museum Definition," International Council of Museums (ICOM), April 2020, <https://icom.museum/en/resources/standards-guidelines/museum-definition/>.
- 46 Terry Eastwood, "General Introduction," in *The Archival Fonds: From Theory to Practice*, ed. Terry Eastwood (Ottawa, Canada: Bureau of Canadian Archivists, 1992), 2–4.
- 47 Samuel Muller, Robert Fruin, and Johan Adriaan Feith, *Manual for the Arrangement and Description of Archives: Drawn up by Direction of the Netherlands Association of Archivists*, Translation of the 2nd ed. (Chicago, Ill.: Society of American Archivists, 2003), 42, 50, 77, <http://hdl.handle.net/2027/mdp.39015057022447>.
- 48 See, for example, Hilary Jenkinson, *The English Archivist: A New Profession, Being an Inaugural Lecture for a New Course in Archive Administration Delivered at University College London 14 October, 1947* (London: H. K. Lewis, 1948); Michel Duchein, "Theoretical Principles and Practical Problems of Respect Des Fonds in Archival Science," *Archivaria* 16 (January 1, 1983): 67; Martine Cardin, "Archives in 3D," *Archivaria*, no. 51 (2001): 112; Terry Eastwood, "A Contested Realm: The Nature of Archives and the Orientation of Archival Science," in *Currents of Archival Thinking*, ed. Heather MacNeil and Terry Eastwood (Westport, United States: ABC-CLIO, LLC, 2017), 5–6.
- 49 See, for example, Peter J. Scott, "The Record Group Concept: A Case for Abandonment," *The American Archivist* 29, no. 4 (October 1, 1966): 493–504; Daniel Pitti, "Encoded Archival Description: The Development of an Encoding Standard for Archival Finding Aids," *The American Archivist* 60, no. 3 (July 1, 1997): 268–83, <https://doi.org/10.17723/aarc.60.3.f5102tt644q123lx>; Richard V. Szary, "Encoded Archival Context (EAC) and Archival Description: Rationale and Background," *Journal of Archival Organization* 3, no. 2–3 (January 10, 2006): 217–27, [https://doi.org/10.1300/J201v03n02\\_16](https://doi.org/10.1300/J201v03n02_16).
- 50 Chris Hurley, "Problems with Provenance," *Archives and Manuscripts* 23, no. 2 (November 1995): 234–59; Tom Nesmith, "The Concept of Societal Provenance and Records of Nineteenth-Century Aboriginal–European Relations in Western

- Canada: Implications for Archival Theory and Practice,” *Archival Science* 6, no. 3–4 (December 1, 2006): 351–60, <https://doi.org/10.1007/s10502-007-9043-9>; Michael Piggott, *Archives and Societal Provenance: Australian Essays*, Chandos Information Professional Series (Oxford, U.K: Chandos, 2012).
- 51 Kimberly Christen, “Tribal Archives, Traditional Knowledge, and Local Contexts: Why the ‘s’ Matters,” *Journal of Western Archives* 6, no. 1 (January 7, 2015), <https://digitalcommons.usu.edu/westernarchives/vol6/iss1/3>.
- 52 Gavan McCarthy, “Finding a Future for Digital Cultural Heritage Resources Using Contextual Information Frameworks,” in *Theorizing Digital Cultural Heritage: A Critical Discourse*, ed. Fiona Cameron and Sarah Kenderdine, Media in Transition (Cambridge, Mass: MIT Press, 2007), 245–60; Gavan McCarthy and Joanne Evans, “Mapping the Socio-Technical Complexity of Australian Science: From Archival Authorities to Networks of Contextual Information,” *Journal of Archival Organization* 5, no. 1–2 (January 7, 2008): 149–75, [https://doi.org/10.1300/J201v05n01\\_08](https://doi.org/10.1300/J201v05n01_08); Daniel Pitti et al., “Social Networks and Archival Context: From Project to Cooperative Archival Program,” *Journal of Archival Organization* 12, no. 1–2 (April 3, 2014): 77–97, <https://doi.org/10.1080/15332748.2015.999544>.
- 53 Expert Group on Indigenous Matters, “Tandanya – Adelaide Declaration” (International Council on Archives, 2019), [https://www.ica.org/sites/default/files/tandanya\\_adelaide\\_declaration\\_eng.pdf](https://www.ica.org/sites/default/files/tandanya_adelaide_declaration_eng.pdf).
- 54 Vannevar Bush, “As We May Think,” *The Atlantic*, July 1945, <https://www.theatlantic.com/magazine/archive/1945/07/as-we-may-think/303881/>.
- 55 Theodor H. Nelson, *Computer Lib/Dream Machines*, Rev. ed (Redmond, Wash: Tempus Books of Microsoft Press, 1987), 31.
- 56 Tim Berners-Lee et al., “World-Wide Web: The Information Universe,” *Internet Research* 2, no. 1 (January 1, 1992): 52, <https://doi.org/10.1108/eb047254>.
- 57 Ted Nelson, *Xanadu Basics 1a – Visible Connection*, accessed 9 May 2018, <https://www.youtube.com/watch?v=hMKy52Intac&feature=youtu.be>; for a detailed history of the developments outlined in this paragraph, see Belinda Barnet, *Memory Machines: The Evolution of Hypertext*, Anthem Scholarship in the Digital Age (London: Anthem Press, 2013).0/0/00 0:00:00 AM
- 58 David Bearman, “Policy Issues for Information Resource Management in the Smithsonian Institution,” November 1985. Information Resource Management: Policy Issues: David Bearman 1985. 000568. SIA.
- 59 Archaeologist Ian Hodder prefers the term ‘things’ because it comes with little disciplinary baggage, in *Entangled: An Archaeology of the Relationships between Humans and Things* (Malden, MA: Wiley-Blackwell, 2012), 7–9.
- 60 Colin Smith, “Mixing It With the Documents and Objects at RACS,” in Roger Trudgeon, ed., *Do Documents and Objects Mix?: Proceedings of a Symposium, June, 1993* (Clayton, Vic.: Deakin University and Health & Medicine Museums Section of Museums Australia Inc, 1994), 27.
- 61 The field of visitor studies has grown in recent decades, including some initial work on the use of digital collections, but further research is required. See, for example, Ross J. Loomis, *Museum Visitor Evaluation: New Tool for Management*, AASLH Management Series 3 (Nashville, Tenn: American Association for State and Local History, 1987); Lynda Kelly, “Understanding Museum Learning from the Visitor’s Perspective,” *Curator* 46, no. 4 (October 2003): 362–66, <https://doi.org/10.1111/j.2151-6952.2003.tb00102.x>; Linda Kelly, “The Interrelationships Between Adult Museum Visitors’ Learning Identities

- and Their Museum Experiences” (Ph.D., University of Technology, Sydney, 2007), [https://australianmuseum.net.au/uploads/documents/6663/final%20thesis%20for%20graduation\\_kelly.pdf](https://australianmuseum.net.au/uploads/documents/6663/final%20thesis%20for%20graduation_kelly.pdf); Lorna M. Hughes, ed., *Evaluating and Measuring the Value, Use and Impact of Digital Collections* (London: Facet Publishing, 2012).
- 62 Marisa Elena Duarte and Miranda Belarde-Lewis, “Imagining: Creating Spaces for Indigenous Ontologies,” *Cataloging & Classification Quarterly* 53, no. 5–6 (July 4, 2015): 677–702, <https://doi.org/10.1080/01639374.2015.1018396>.
- 63 Nicholas Thomas, *The Return of Curiosity: What Museums Are Good for in the 21st Century* (London: Reaktion Books, 2016), 75–83.