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#### **Original Study**

Barry Molloy\*, Marina Milić

## Wonderful Things? A Consideration of 3D Modelling of Objects in Material Culture Research

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Abstract: The role of 3D modelling in archaeology is increasing exponentially, from fieldwork to architecture to material culture studies. For the study of archaeological objects the roles of digital and print models for public engagement has been much considered in recent literature. For model makers, focus has typically been placed on exceptional and visually striking objects with inherent appeal. In contrast, this paper explores some of the potential roles for 3D digital models for routine artefact research and publication. Particular emphasis is placed on the challenges this technology raises for archaeological theory and practice. Following a consideration of how 3D models relate to established illustration and photographic traditions, the paper evaluates some of the unique features of 3D models, focussing on both positive and negative aspects of these. This is followed by a discussion of the role of potential research connections between digital and craft models in experimental research. Our overall objective is to emphasise a need to engage with the ways in which this gradual development has begun to change aspects of long-established workflows. In turn, the increasing use of this technology is argued to have wider ramifications for the development of archaeology, and material culture studies in particular, as a discipline that requires reflection.

Keywords: Material culture studies, 3D modelling, replicas, experimental archaeology

#### 1 Introduction

Archaeology has been described as a discipline of things (Olsen et al., 2012; Witmore, 2014), placing material culture at centre stage for understanding the past. Yet, we could consider the interplay between people and objects to be fundamental for deriving social meaning (Barrett, 2016), and so our approach to either is fundamentally predicated on a desire to know more about the other. This duality is not restricted to ancient relations. Artefacts as physical things invite interaction, and so by handling them as we study them today, we learn to think through, as well as about, these objects. Their material qualities and affordances influence our thinking still. It is little surprise then that we commonly use visual, as well as narrative, methods for documenting and presenting material culture. This visual engagement is now changing as advances in digital technology have relatively recently made it possible for 3D interactive models of objects to be easily generated. This presents a new way to engage and interact with material culture in regular

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Marina Millé, independent researcher

# **Material Culture A Research Guide**

**Robert DuPlessis** 

#### **Material Culture A Research Guide:**

**Handbook of Material Culture** Christopher Y. Tilley,2006-01-26 Provides a critical survey of the theories concepts intellectual debates substantive domains and traditions of study characterizing the analysis of things This handbook charts an interdisciplinary field of studies that makes a fundamental contribution to an understanding of what it means to be human

Material Culture Kenneth L. Ames, 1985 The Cambridge Handbook of Material Culture Studies Lu Ann De Cunzo, Catharine Dann Roeber, 2022-06-09 Material culture studies is an interdisciplinary field that examines the relationships between people and their things the production history preservation and interpretation of objects It draws on theory and practice from disciplines in the social sciences and humanities such as anthropology archaeology history and museum studies Written by leading international scholars this Handbook provides a comprehensive view of developments methodologies and theories It is divided into five broad themes embracing both classic and emerging areas of research in the field Chapters outline transformative moments in material culture scholarship and present research from around the world focusing on multiple material and digital media that show the scope and breadth of this exciting field Written in an easy to read style it is essential reading for students researchers and professionals with an interest in material culture Culture: Oxford Bibliographies Online Research Guide Robert DuPlessis, 2010-06 This ebook is a selective guide designed to help scholars and students of the ancient world find reliable sources of information by directing them to the best available scholarly materials in whatever form or format they appear from books chapters and journal articles to online archives electronic data sets and blogs Written by a leading international authority on the subject the ebook provides bibliographic information supported by direct recommendations about which sources to consult and editorial commentary to make it clear how the cited sources are interrelated This ebook is just one of many articles from Oxford Bibliographies Online Atlantic History a continuously updated and growing online resource designed to provide authoritative guidance through the scholarship and other materials relevant to the study of Atlantic History the study of the transnational interconnections between Europe North America South America and Africa particularly in the early modern and colonial period Oxford Bibliographies Online covers most subject disciplines within the social science and humanities for more information visit www oxfordbibliographies com History through material culture Leonie Hannan, Sarah Longair, 2017-04-20 History through material culture is a unique step by step guide for students and researchers who wish to use objects as historical sources Responding to the significant scholarly interest in historical material culture studies this book makes clear how students and researchers ready to use these rich material sources can make important valuable and original contributions to history Written by two experienced museum practitioners and historians the book recognises the theoretical and practical challenges of this approach and offers clear advice on methods to get the best out of material culture research With a focus on the early modern and modern periods this volume draws on examples from across the world and demonstrates how to use

material culture to answer a range of enquiries including social economic gender cultural and global history Material Material Culture Kenneth L. Ames, 1985 culture .2000 The Routledge Handbook of Material Culture in Early Modern Europe Catherine Richardson, Tara Hamling, David Gaimster, 2016-09-13 The Routledge Handbook of Material Culture in Early Modern Europe marks the arrival of early modern material culture studies as a vibrant fully established field of multi disciplinary research The volume provides a rounded accessible collection of work on the nature and significance of materiality in early modern Europe a term that embraces a vast range of objects as well as addressing a wide variety of human interactions with their physical environments This stimulating view of materiality is distinctive in asking questions about the whole material world as a context for lived experience and the book considers material interactions at all social levels There are 27 chapters by leading experts as well as 13 feature object studies to highlight specific items that have survived from this period defined broadly as c 1500 c 1800 These contributions explore the things people acquired owned treasured displayed and discarded the spaces in which people used and thought about things the social relationships which cluster around goods between producers vendors and consumers of various kinds and the way knowledge travels around those circuits of connection The content also engages with wider issues such as the relationship between public and private life the changing connections between the sacred and the profane or the effects of gender and social status upon lived experience Constructed as an accessible wide ranging guide to research practice the book describes and represents the methods which have been developed within various disciplines for analysing pre modern material culture It comprises four sections which open up the approaches of various disciplines to non specialists Definitions disciplines new directions Contexts and categories Object studies and Material culture in action This volume addresses the need for sustained coherent comment on the state breadth and potential of this lively new field including the work of historians art historians museum curators archaeologists social scientists and literary scholars It consolidates and communicates recent developments and considers how we might take forward a multi disciplinary research agenda for the study of material culture in periods before the mass production of goods The Ins and Outs of Business and Professional Discourse Research Glen Alessi, Geert Jacobs, 2015-12-29 Winner of the Association for Business Communication's Distinguished Publication on Business Communication Award 2016 This edited volume offers a collection of original chapters focusing on the Ins and Outs of professional discourse research Drawing on insights from LSP ethnography and discourse analysis it covers a wide range of issues ranging from gaining access and collecting data to feeding results back in the form of recommendations to practitioners Handbook of Research on the Facilitation of Civic Engagement through Community Art Hersey, Leigh Nanney, Bobick, Bryna, 2016-12-05 Outreach and engagement initiatives are crucial in promoting community development This can be achieved through a number of methods including avenues in the fine arts The Handbook of Research on the Facilitation of Civic Engagement through Community Art is a comprehensive reference source for emerging perspectives on

the incorporation of artistic works to facilitate improved civic engagement and social justice Featuring innovative coverage across relevant topics such as art education service learning and student engagement this handbook is ideally designed for practitioners artists professionals academics and students interested in active citizen participation via artistic channels

Handbook of Medieval Studies Albrecht Classen, 2010-11-29 This interdisciplinary handbook provides extensive information about research in medieval studies and its most important results over the last decades The handbook is a reference work which enables the readers to guickly and purposely gain insight into the important research discussions and to inform themselves about the current status of research in the field The handbook consists of four parts The first large section offers articles on all of the main disciplines and discussions of the field The second section presents articles on the key concepts of modern medieval studies and the debates therein The third section is a lexicon of the most important text genres of the Middle Ages The fourth section provides an international bio bibliographical lexicon of the most prominent medievalists in all disciplines A comprehensive bibliography rounds off the compendium The result is a reference work which exhaustively documents the current status of research in medieval studies and brings the disciplines and experts of the field The Politics of the Artificial Victor Margolin, 2018-01-11 Emerging from the world of commercial art and product together styling design has now become completely integrated into human life Its marks are all around us from the chairs we sit on to the Web sites on our computer screens One of the pioneers of design studies and still one of its most distinguished practitioners Victor Margolin here offers a timely meditation on design and its study at the turn of the millennium and charts new directions for the future development of both fields Divided into sections on the practice and study of design the essays in The Politics of the Artificial cover such topics as design history design research design as a political tool sustainable design and the problems of design's relation to advanced technologies Margolin also examines the work of key practitioners such as the matrix designer Ken Isaacs Throughout the book Margolin demonstrates the underlying connections between the many ways of reflecting on and practicing design He argues for the creation of an international interdisciplinary field of design research and proposes a new ethical agenda for designers and researchers that encompasses the responsibility to users the problems of sustainability and the complicated questions of how to set boundaries for applying advanced technology to solve the problems of human life Opinionated and erudite Victor Margolin's The Politics of the Artificial breaks fresh ground in its call for a new approach to design research and practice Designers engineers architects anthropologists sociologists and historians will all benefit from its insights 
The Oxford Handbook of Material Culture Studies Dan Hicks, Mary C. Beaudry, 2010-09-02 Written by an international team of experts the Handbook makes accessible a full range of theoretical and applied approaches to the study of material culture and the place of materiality in social theory presenting current thinking about material culture from the fields of archaeology anthropology geography and science and technology studies A Bibliography of Museum Studies Simon J. Knell, 2016-12-05 A comprehensive bibliographic reference for students

and others wishing to investigate the contemporary literature on museums and collections. The references are systematically arranged into sections including collections management communication and exhibitions museum education material culture the museums profession and museum management Compiled from the research and teaching materials of the Department of Museum Studies at the University of Leicester it provides an essential resource for anyone studying or working in museums Containing more than 4 000 references this new bibliography provides ready access to the literature whether you are developing a disaster plan or visitor survey or studying the history of museum education The SAGE Handbook of Visual Research Methods Eric Margolis, Luc Pauwels, 2011-08-09 This 42 chapter volume represents the state of the art in visual research It provides an introduction to the field for a variety of visual researchers scholars and graduate students in art sociology anthropology communication education cultural studies women s studies ethnic studies global studies and related social science and humanities disciplines The SAGE Handbook of Visual Research Methods encompasses the breadth and depth of the field and points the way to future research possibilities It illustrates cutting edge as well as long standing and recognized practices This text is not only about research it is also an example of the way that the visual can be incorporated in data collection and the presentation of research findings Contributors to the book are from diverse backgrounds and include both established names in the field and rising stars Chapters describe a methodology or analytical framework its strengths and limitations possible fields of application and practical guidelines on how to apply the method or technique The Sage Handbook of Visual Research Methods is organized into seven main sections I Framing the Field of Visual Research II Producing Visual Data and Insight III Participatory and Subject Centered Approaches IV Analytical Frameworks and Approaches V Vizualization Technologies and Practices VI Moving Beyond the Visual VII Options and Issues for Using and Presenting Visual Research Islam in Africa: Oxford Bibliographies Online Research Guide Oxford University Press, 2010-05-01 This ebook is a selective guide designed to help scholars and students of Islamic studies find reliable sources of information by directing them to the best available scholarly materials in whatever form or format they appear from books chapters and journal articles to online archives electronic data sets and blogs Written by a leading international authority on the subject the ebook provides bibliographic information supported by direct recommendations about which sources to consult and editorial commentary to make it clear how the cited sources are interrelated related A reader will discover for instance the most reliable introductions and overviews to the topic and the most important publications on various areas of scholarly interest within this topic In Islamic studies as in other disciplines researchers at all levels are drowning in potentially useful scholarly information and this guide has been created as a tool for cutting through that material to find the exact source you need This ebook is a static version of an article from Oxford Bibliographies Online Islamic Studies a dynamic continuously updated online resource designed to provide authoritative guidance through scholarship and other materials relevant to the study of the Islamic religion and Muslim cultures Oxford Bibliographies

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folk literature music and crafts sports and holidays tall tales and legendary figures genres and forms scholarly approaches and theories regions and ethnic groups performers and collectors writers and scholars religious beliefs and practices The alphabetically arranged entries vary from concise definitions to detailed surveys each accompanied by a brief up to date bibliography Special features More than 2000 contributors Over 500 articles spotlight folk literature music crafts and more Alphabetically arranged Entries accompanied by up to date bibliographies Edited by America s best known folklore authority

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