The shapes arise!
Shapes of factories, arsenals, foundries, markets;
Shapes of the two-threaded tracks of railroads;
Shapes of the sleepers of bridges, vast frameworks, girders, arches;
Shapes of the fleets of barges, tows, lake and canal craft, river craft.
— Walt Whitman, 1871, in Song of the Broad-Axe
Archaeologists investigating sites of craft and industrial enterprise often puzzle over a domain of bewildering ruins. Locations of remarkable energy, tumult, and creativity stand silent. This book provides an overview of the archaeology of American craft and industrial enterprises, outlines developments in theories, research questions, and interpretative frameworks, and presents case studies from a wide range of subjects (view this summary in pdf).

Research focused on industrial enterprises traverses a spectrum of perspectives. Some limit their efforts to recording, mapping, and studying the mechanics of a site. Others examine comparative questions of changes of technologies over time and space. Many analysts look away from the buildings and equipment of the workplace and focus instead on the workers, their families, residences, lifeways, and health experiences. With many sites presenting standing ruins, historians and archaeologists often encounter local stakeholder groups who wish to promote heritage themes and tourism potentials.

Conjectural reconstruction drawing of the Pottersville kiln in Edgefield, SC, by Oliver Mueller-Heubach, courtesy of Robert Hunter and Oliver Mueller-Heubach.

All of these perspectives can be pursued with significant advances in research and curation methods. Investigations often range from microscopic analysis of product constituents to large-scale, three dimensional recording of locations and features with high-resolution, laser technologies. Past debates questioned whether primary emphasis should be on heritage recording or on archaeological research questions. More recent trends focus on collaborations across interest groups.
This expansive yet concise survey discusses archaeological research from sites across the United States that once manufactured, harvested, or processed commodities. Through studies of craft enterprise and the industrial revolution, this book uncovers key insights into American history from the seventeenth through the nineteenth centuries.

Exploring evidence from textile mills, glassworks, cutlery manufacturers, and tanneries, this book describes the complicated transition from skilled manual work to mechanized production methods, and I offer examples of how artisanal skill remained important in many factory contexts. The book also traces the distribution and transportation of goods along canals and railroads. This study delves into sites of extraction, such as lumber mills, copper mines, and coal fields, and reviews diverse methods for smelting and shaping iron. The book features an in-depth case study of my collaborative, multi-year project of investigations of Edgefield, South Carolina, a community that pioneered the production of alkaline-glazed stoneware pottery.

I outline shifts within the field of industrial archaeology over the past century that have culminated in the recognition that these locations of remarkable enterprise represent the lives and ingenuity of many people. In addition, I point to ways the field can help inform sustainable strategies for industrial enterprises in the present day.

Peer reviewers of this study observe —

“Fennell offers us a fresh and exciting expansion of industrial archaeology through the lens of craft production. This book, with its impressive array of case studies, unequivocally demonstrates the relevance of historical and industrial archaeology to the broader anthropological project.” — Charles E. Orser Jr., author of The Archaeology of Race and Racialization in Historic America.

“Sheds light on the vast array of craft and industrial work that shaped the American experience and the North American landscape. Fennell amasses a broad range of archaeological scholarship to identify contributions and new directions.” — Paul J. White, author of The Archaeology of American Mining.

This book’s expanded table of contents follows, along with a bibliography of sources and a list of internet resources related to industrial archaeology.

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About the author

I am an anthropologist specializing in historical archaeology as a Professor of Anthropology and Law at the University of Illinois at Urbana-Champaign, and a faculty affiliate of the Department of Landscape Architecture, College of Law, Center for African Studies, and the Department of African American Studies. I also serve as a Visiting Professor of Law at the University of Chicago Law School, teaching seminars on the intersections of racism, law, social norms, and the social sciences.

My empirical research addresses subjects in trans-Atlantic historical archaeology and the dynamics of social group affiliations and lifeways among Europeans, Africans, and various social groups within the Americas. These research initiatives include interpretative frameworks focusing on social group identities, ethnic group dynamics and racialization, diaspora studies, regional systems and commodity chains, stylistic and symbolic elements of material culture, consumption patterns, and analysis of craft and industrial enterprises. I am also the founding editor of the Journal of African Diaspora Archaeology and Heritage, publisher and past editor of the African Diaspora Archaeology Newsletter, member of the editorial board of the International Journal of Historical Archaeology, past member of the board of directors of the Society for Historical Archaeology, and past president of the Illinois Archaeological Survey. A list of my publications, including other books, research papers, other works in progress, and course offerings is provided in my resume.


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Internet Resources on Industrial Archaeology

American Canals, 1820-1860 (American Panorama Project):
https://dsl.richmond.edu/panorama/canals/

American Canals Guides:
https://americancanals.org/american-canal-guides/

American Canal Society:
https://americancanalsociety.org/

Archaeology of Edgefield, SC Pottery Communities (U. Illinois):
http://www.histarch.illinois.edu/Edgefield/

Archaeo-Metallurgical Bibliography (Oxford U.):
http://users.ox.ac.uk/~salter/arch-metals/bib01.htm

Association for Industrial Archaeology:
https://industrial-archaeology.org/

AIA Internet Resource Links:
https://industrial-archaeology.org/links/

AIA Publications Online:
https://industrial-archaeology.org/publications/

Black Craftspeople Digital Archive:
https://blackcraftspeople.org/

Bridge Truss Types (HAER):
https://www.nps.gov/hdp/samples/HAER/truss%20poster.pdf

Chesapeake & Ohio Canal in Washington County, Md.:
http://www.whilbr.org/CandOCanal/index.aspx

Cliff Mine Archaeology Project (MTU):
https://cliffmine.wordpress.com/

Construction History Society of America:
https://www.constructionhistorysociety.org/

Crafting a Samurai Sword (Aeon):
Glimpse Inside a Samurai Sword Workshop

Derwent Valley Mills History (UK, World Heritage Site):
http://www.derwentvalleymills.org/

Down the Old Potomac, Canal and Rail Traffic (1917 film):  
https://www.loc.gov/item/00694119

East Cornwall (UK) Mining History Association:  
http://www.mininghistoryeastcornwall.btck.co.uk/

Edgefield, South Carolina Potteries Archaeology Project:  
http://www.histarch.illinois.edu/Edgefield/

European Route of Industrial Heritage:  
https://www.erih.net/

Falling Creek Ironworks, Virginia:  
https://www.chesterfield.gov/4299/History

Flemish Ass’n for Industrial Archaeology:  
http://www.industrieelerfgoed.be/content/english

General Archaeology Resources (U. Illinois):  
http://faculty.las.illinois.edu/cfennell/bookmark2.html

Greenwich (UK) Industrial History:  
https://greenwichindustrialhistory.blogspot.com/

Historic American Buildings Survey (HABS),  
Historic American Engineering Record (HAER), and  
Historic American Landscapes Survey (HALS) (Library of Congress):  
https://www.loc.gov/pictures/collection.hh/

Historic Bridges:  

Historical Metallurgy Society:
https://historicalmetallurgy.org/

History of Sanitary Sewers:  
http://www.sewerhistory.org/

Industrial Archaeology Review (Taylor & Francis):  
https://www.tandfonline.com/toc/yiar20/current

Industrial Archaeology Summary (M. Palmer, Oxford U. Biblios.):  
https://www.oxfordbibliographies.com/

Industrial Crafts Research Network:  
https://simonpenny.net/industrial-crafts.html

Industrial Heritage & Art (F. Welgemoed’s social media page):  
https://www.facebook.com/groups/464056810314375/


Industrial Heritage Society of Ireland:  
https://ihai.ie/

Industrial Photography Archive:  
http://www.hfinster.de/StahlArt2/archive-en.html

Institute of Materials, Minerals and Mining:  
https://www.iom3.org/

Iron Bridge Gorge and Coalbrookdale (UK):  
https://www.ironbridge.org.uk/our-story/the-iron-bridge/
Lewis Hine’s Photography on Child Labor (U.S. Archives):
https://www.archives.gov/education/lessons/hine-photos

London Canal Museum:
https://www.canalmuseum.org.uk/

London Museum of Water & Steam, Engines Collections:
https://waterandsteam.org.uk/our-engines/

Mining History Association:
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Mining History Network:
https://projects.exeter.ac.uk/mhn/welcome.html

Modern Ruins, Photographs by P. Buehler:
http://modern-ruins.com/

National Archives Guides to HABS/HAER:
https://www.archives.gov/research/guide-fed-records/groups/515.html
National Assoc. of Mining History (UK), Internet Resource Links:
https://www.namho.org/links.php

National Iron and Steel Heritage Museum:

Museum in Coatesville, Pennsylvania:
https://steelmuseum.org/

Exhibits:
https://steelmuseum.org/exhibits.cfm

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https://steelmuseum.org/video/index.cfm

Bibliography:
https://steelmuseum.org/bibliography.cfm

National Museum of Industrial History, Bethlehem, Pa.:
https://www.nmih.org/virtualmuseum/

National Park Service, Heritage Documentation (HABS/HAER/HALS):
https://www.nps.gov/hdp/

National Park Service, Industrial Heritage Parks and Sites:
https://www.nps.gov/subjects/industry/visit.htm

Newcomen Int’l Soc. for History of Engineering & Technology:
https://www.newcomen.com/

Oxford House Ind’l History Society & Risca Museum

Projects:
http://www.riscamuseum.org.uk/projects.htm

Publications:
http://www.riscamuseum.org.uk/publications.htm

Resource Links:
http://www.riscamuseum.org.uk/resources.htm

Peak District (UK) Mines Historical Society:

Mining Publications and Resources:
https://pdmhs.co.uk/resources/

Industrial Heritage Sites in Derbyshire:
https://pdmhs.co.uk/derbyshire-industrial-heritage-sites/

Railroad Histories Resources (cf. Polk 2021)

Central Pacific Photographic Library:  
http://cprrr.org/

Grand Trunk Western Historical Society:  
https://gtwhs.org/

Great Northern Railway-Northern Pacific Railway Archive:  

Interstate Commerce Commission (ICC) Valuation Reports and Maps:  
https://catalog.archives.gov/id/562366

ICC Railroad Valuation Records Overview:  
https://www.archives.gov/research/transportation/railroad-valuation

National Railway Historical Society:  
https://nrhs.com/

New York Central System Historical Society:  
https://nycshs.org/
New York High Line History:
https://www.thehighline.org/history/

Aaron Bohrod, *Chicago Scene.*

Pennsylvania Railroad Technical & Historical Society:
http://prrths.com/

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https://utahrails.net/

Records Relating to North American Railroads (D. Pfeiffer):

Records Relating to Railroads, Cartographic Sec. of National Archives:

Santa Fe Railway Historical and Modeling Society:
https://sfrhms.org/

Southern Pacific Historical & Technical Society:
https://sphts.org/

Southern Railway Archives at Virginia Tech. University:

Southern Railway Historical Association:
http://srha.net/
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https://www.wrm.org/

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![Image of a person working on a lathe during WWI]

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https://stephenmallon.com/
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http://www.svalbardarchaeology.org/

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https://ticcih.org/

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   https://ticcih.org/ticcih-thematic-studies-and-published-reports/

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Tide Mills Institute:  
https://www.tidemillinstitute.org/

Treasury of Weary Souls:  
Enslaved African Americans Who Built Industries:  
http://www.treasuryofwearysouls.com/

UNESCO World Heritage List, Industrial Related Sites:  
https://www.erih.net/service/links/category/

U.S. Energy History Visualization (U. Chicago):  
https://us-sankey.rcc.uchicago.edu/

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