



**Citation:** M.C. Maurer (2025)  
Facsimiles and Transcription:  
EEBO-TCP and Narratives of  
Textual Production. *Jems.* 14:  
pp. 17-31. doi: <http://dx.doi.org/10.36253/JEMS-2279-7149-16516>

**Copyright:** © 2025 M.C. Maurer.  
This is an open access, peer-  
reviewed article published by  
Firenze University Press (<https://oajournals.fupress.net/index.php/bsfm-jems>) and distributed under  
the terms of the Creative Com-  
mons Attribution License, which  
permits unrestricted use, distri-  
bution, and reproduction in any  
medium, provided the original  
author and source are credited.

**Data Availability Statement:**  
All relevant data are within the  
paper and its Supporting Infor-  
mation files.

**Competing Interests:** The  
Author(s) declare(s) no conflict  
of interest.

**Editors:** D. Pallotti, P. Pugliatti  
(University of Florence)

# Facsimiles and Transcription EEBO-TCP and Narratives of Textual Production

Margaret C. Maurer  
Dartmouth College (<[Margaret.C.Maurer@dartmouth.edu](mailto:Margaret.C.Maurer@dartmouth.edu)>)

## Abstract

Early English Books Online Text Creation Partnership (EEBO-TCP), a search-  
able database of XML-encoded transcriptions of over 60,000 early English  
books, has transformed how scholars research and teach early modern texts.  
This immense archive of digital facsimiles was transcribed and encoded by  
keyers in India and the Philippines. Despite the keyers' centrality to the project,  
EEBO-TCP and its vendors do not disclose the keyers' wages, labor conditions,  
or precarity. Examining absences, omissions, and rhetorical maneuvers on the  
Text Creation Partnership (TCP) website, the article argues that its rhetoric  
reinforces colonial epistemologies by situating its knowledge production in the  
United Kingdom and United States while decentering the keyers' expertise,  
scholarly labor, and essential role. Ultimately, the labor of digitization must be  
brought to the forefront in order to understand how digital texts are material  
and political; otherwise, digital archives will reproduce colonial epistemologies  
and cultural imperialism in the production of the digital cultural record. Finally,  
highlighting the work of scholars of critical digital humanities and critical  
archival studies, the article concludes by considering alternative approaches to  
digital creation and collaboration that center people, relationships, and process.

**Keywords:** Archives, Bibliography, Digital Humanities, Digitization, Labor

Is it not possible,  
that a Book may be Writ in the East-Indies,  
Printed in the West-Indies,  
yet may be approved or disapproved of in London?  
Daniel Phillips, *Proteus redivivus*, 1700

Daniel Phillips, describing how early modern books and their  
production move across borders, imagines a hypothetical book  
whose creation and readership spans across the globe.<sup>1</sup> A quick

<sup>1</sup> Daniel Phillips, a Quaker doctor, uses this example to counter a critic  
who questions how a book could be written in Scotland, published in Holland,  
and censured in London. For more on Phillips, see Cadbury 1968.

search on Early English Books Online Text Creation Partnership (EEBO-TCP) can easily pull up Phillips' words, first printed in London 'in *White-Hart-Court* in *Gracious Street*, 1700', but the ease of finding this digital facsimile belies its production through a series of time- and labor-intensive remediations: the microfilm series of Early English Books (EEB), the digital images of Early English Books Online (EEBO), and the searchable text of EEBO-TCP.<sup>2</sup> The digital facsimiles of EEBO and EEBO-TCP have transformed how scholars research and teach early modern texts;<sup>3</sup> not only do these facsimiles enable new and innovative modes of research, but the transcriptions are freely available online, providing unprecedented access to early modern English writing. Additionally, scholars of early modern book history and digital humanities have observed that these digital facsimiles are themselves bibliographic and material objects of study in their own right.<sup>4</sup>

Beginning in 2000, Early English Books Online (EEBO) collaborated with the newly-created Text Creation Partnership (TCP) to produce a searchable database of XML-encoded transcriptions of over 60,000 English books, the majority of which date from before 1700. Funded by ProQuest – which owns the microfilms of EEB and the digitizations of EEBO – and 150 libraries,<sup>5</sup> the project's commercial-nonprofit partnership was heralded as 'a model for future collaborations between libraries and other content companies' (Blumenstyk 2001).<sup>6</sup> Library partners and ProQuest subscribers received initial access to transcriptions before their eventual public release, with the project concluding in 2020.<sup>7</sup> The resulting transcriptions are now free and available online, though the ProQuest version of the database that places the searchable text of EEBO-TCP alongside EEBO's digital images still requires a subscription. EEBO-TCP's online availability further enables its widespread use in and influence on early modern studies.

The EEBO-TCP database – all 60,000+ texts – was not the product of a computer program like optical character recognition (OCR). Instead, each text was transcribed character-by-character by humans. More specifically, EEBO-TCP partnered with third-party vendors, offshoring this labor of transcription and mark-up to keyers in India and the Philippines. Because editors only proofed 3-5% of each transcription, the foundation of EEBO-TCP (and the many projects and papers derived from EEBO-TCP) is these keyers' unedited work.<sup>8</sup> Despite the keyers' centrality to the project, EEBO-TCP and its vendors do not disclose the keyers' wages, labor

<sup>2</sup> On the construction of EEB and EEBO, see Kichuk 2007; Gadd 2009; Mak 2014; Gavin 2021; Lesser 2019.

<sup>3</sup> Because of the slippage between original and facsimile texts, especially in citational practices, it is difficult to gauge precisely the full impact of EEBO and EEBO-TCP on the field of early modern scholarship. Blaney and Siefring 2017 observe that academics fail to cite digital resources like EEBO-TCP, preferring to cite the original print source rather than the digital intermediary.

<sup>4</sup> As the acronym expands, so too does the distance between the printed book and facsimile, and with each remediation, the possibility of error increases. On EEBO, see Kichuk 2007; Gadd 2009; Mak 2014; Lesser 2019; Misson 2021; Misson and Singh 2022. Often, through error, the process of remediation is made visible (see Trettien 2013).

<sup>5</sup> For a full list of library partners who funded the project, see 'Our Scholarly Partners', *Text Creation Partnership*, <<https://textcreationpartnership.org/about-the-tcp/about-partner-libraries/>>, accessed 1 December 2024.

<sup>6</sup> The *Text Creation Partnership* website further notes that one goal was pooling resources and 'collaborat[ing] with commercial providers, rather than constantly bargaining and competing with them' ('Home Page', *Text Creation Partnership*, <<https://textcreationpartnership.org/>>, accessed 1 December 2024).

<sup>7</sup> The works were released in two phases: Phase I (2000-2009; released to the general public in 2015) and Phase II (2009-2019; released to the general public in 2020). EEBO-TCP is no longer actively transcribing, and as of August 2020, the project is currently concluded, barring future funding ('About EEBO-TCP', *Text Creation Partnership*, <<https://textcreationpartnership.org/tcp-texts/eebo-tcp-early-english-books-online/>>, accessed 1 December 2024).

<sup>8</sup> While 5% is usually cited as the minimum amount of text that an editor should quality check, both in pages and in bytes, the instructions in 'Calculating error rates for EEBO data' notes that for 'very large books ... only 3% rather than 5% of the whole' needs to be checked ('Calculating errors rates for EEBO data', *Text Creation Partnership*, <<https://textcreationpartnership.org/docs/errors/errors1.html>>, accessed 1 December 2024).

conditions, or precarity. This absence of information is not only troubling, but indicative of a larger trend on the TCP website to minimize the keyers' role and location. Examining the TCP website, I argue that its rhetoric reinforces colonial epistemologies by situating its knowledge production in the United Kingdom and United States while decentering the keyers' expertise, scholarly labor, and essential role. The United States and United Kingdom, along with their institutions and individuals, are credited as the authors, centers of knowledge production, and scholarly authority, while keyers in India and the Philippines are largely omitted, their individual contributions subsumed in collective and opaque language. EEBO-TCP has revolutionized early modern studies, but it is also a revolution in that it is cyclical, retracing the colonial epistemologies contained within the early modern texts it replicates. It is not simply that the TCP should update their website; instead, examining the absences, omissions, and rhetorical maneuvers of the TCP website demonstrates the necessity of bringing the labor of digitization to the forefront to understand how digital texts are material and political. Otherwise, digital archives like EEBO-TCP will continue to reproduce colonial epistemologies and cultural imperialism in the production of the digital cultural record. Finally, highlighting the work of scholars of critical digital humanities and critical archival studies, I conclude by considering alternative approaches to digital creation that center people, relationships, and process.

Phillips' words gain new resonance when read as a digital transcription on EEBO-TCP. Phillips imagines the world centered on London, balanced between two seemingly interchangeable Indies to the east and west. While the labor of book production can be exported to British trading posts or colonies, the readers who evaluate the book's merit are located in England. Of course, this resonance is an anachronistic premonition that is only possible through hindsight. At the same time, the offshoring of scholarly labor to formerly colonized countries cannot be divorced from early modern English worldviews that sought to construct hierarchies of racial and national identities. However, I begin with Phillips not only because he imagines book production across continents intoned with colonial ambitions, but because his rhetorical question – 'Is it not possible...?' – might also inadvertently invite us to imagine new approaches to constructing digital archives and projects.

An EEBO-TCP user might assume a computer generated the text through OCR; both HathiTrust and Google Books, for example, use OCR to generate transcriptions.<sup>9</sup> However, the EEBO database, comprised of black-and-white scans of microfilm of pre-1700 texts, proves difficult for OCR, and, furthermore, OCR would not generate XML-encoded files.<sup>10</sup> Until 2019, TCP's website featured the banner: 'Transcribed by hand. Owned by libraries. Made for everyone'.<sup>11</sup> The website and other TCP-affiliated materials<sup>12</sup> repeatedly note hand-typed transcriptions as a selling point, emphasizing the necessity and accuracy compared to OCR.<sup>13</sup> However, even if an

<sup>9</sup> Burkert 2023 discusses how many textual databases, including HathiTrust and Google Books, rely on invisible labor. Further, Gray and Suri 2019 demonstrate that OCR does not necessarily elide the human labor of character input, as artificial intelligence needs to be taught how to read and human workers sometimes supplement character input to substitute or complement computer-generated characters.

<sup>10</sup> 'Results of Keying instead of OCR', *Text Creation Partnership*, <<https://textcreationpartnership.org/using-tcp-content/results-of-keying/>>, accessed 1 December 2024.

<sup>11</sup> *Text Creation Partnership*, captured on 15 September 2019 by the *Internet Archive Wayback Machine* (<<https://web.archive.org/web/20190915042804/http://www.textcreationpartnership.org:80/>>, accessed 1 December 2024).

<sup>12</sup> For example, Welzenbach 2012, which serves as a cited source for both the Folgerpedia and Wikipedia pages on TCP.

<sup>13</sup> In the 2007 TCP Executive Board Meeting Minutes, EEBO-TCP's financial success is contrasted with lower sales from Evans-TCP and ECCO-TCP '(for a variety of reasons, chiefly the presence of OCR text in both projects)'. These minutes are now stored on the *Internet Archive Wayback Machine* (<<https://wayback.archive-it.org/5871/20190806191838/http://www.textcreationpartnership.org/tcp-board-meeting-minutes-2007-10-30/>>, accessed 1 December 2024).

EEBO-TCP user was familiar with these materials – perhaps by attending a talk or browsing the website, Folgerpedia, and Wikipedia – it would not be clear whose hands did the transcriptions.

EEBO-TCP outsourced transcription and mark-up to for-profit vendors: Apex CoVantage, SPi Global, Aptara, and AEL Data.<sup>14</sup> These Business Processing Outsourcing (BPO) companies offshored the labor of transcription to thousands of keyers in India and the Philippines.<sup>15</sup> As Peter C. Herman observes, offshoring is associated with cutting production costs *and* exploitation:

These are not countries known for high wages or worker benefits. EEBO-TCP, in other words, is made possible by the same global economy that grants the first world cheap clothing and affordable electronics. We rely, in other words, on outsourced, cheap labor for our comforts and now, it seems, for our sometimes recondite scholarship. (2020, 215)

Herman articulates the implications of offshoring when he describes these locations as synonymous ('in other words') with workers having less protections and being paid less than workers located in the United States or United Kingdom, where EEBO-TCP's editors are based. Herman's observation gestures towards a compounding effect; if users recognize certain practices (offshoring) or countries associated with these practices (India or the Philippines) as exploitative, this might deter companies from naming these practices or countries – even if it does not deter them from benefitting from these practices.

James Misson and Devani Singh critique Herman's observation, saying that it is 'imprudent' for early modern scholars to speculate on keyers' wages and labor conditions based solely on the country where the keyers are located. Misson and Singh observe that his

reaction ... seems prompted only by the locations of the keyers, whose workplaces are "not countries known for high wages and worker benefits." This question of the conditions under which the EEBO-TCP work was performed is a legitimate one, but it is one which we believe is best pursued by researchers with the expertise to appropriately contextualise the socio-economic situation of the keyers. In the absence of information about the companies' practices, it is imprudent for early modernists to imply that the EEBO-TCP keying contracted out to offshore companies took place under problematic labour conditions by virtue of their location in particular countries. (2022, 525)

It is worth bringing to the forefront that, despite this critique, Misson and Singh join Herman in advocating that EEBO-TCP should provide greater transparency regarding the keyers' roles, including credit for individual keyers. That said, here they interpret Herman's concern with labor practices as solely extrapolated from the countries where the keyers live. However, Herman's references to the 'global economy' and 'outsourced, cheap labor' make it clear that his apprehension is not merely in response to particular countries, but how the commodities

<sup>14</sup> While some sources only list Apex CoVantage and SPi Global, all four companies are listed on 'TCP staff', *Text Creation Partnership*, <<https://textcreationpartnership.org/about-the-tcp/tcp-staff/>>, accessed 1 December 2024.

<sup>15</sup> While *outsourcing* refers to the practice of contracting with a third-party company, *offshoring* in particular refers to the practice of moving part or all of a business abroad 'usually to take advantage of lower costs' (OED, *offshore v.*, <<http://www.oed.com/view/Entry/266790>>, accessed 1 December 2024). Sources differ as to whether or not there are hundreds or thousands of keyers and coders who have worked on EEBO-TCP. It is unclear if these differing terms are due to an increase of cumulative workers over time or if the specific number of keyers is unknown to some sources. While the TCP website says 'hundreds', Paul Schaffner writes that he indirectly supervised 'thousands of taggers and keyers' as the production manager of EEBO-TCP. See 'TCP staff', *Text Creation Partnership* (<<https://textcreationpartnership.org/about-the-tcp/tcp-staff/>>, accessed 1 December 2024); and Paul Schaffner's candidate statement for TEI Council, 'TEI Elections 2007' (<<https://www.tei-c.org/Vault/MembersMeetings/2007-info/mm40.html>>, accessed 1 December 2024).

of the Global North rely on labor from countries in the Global South. After all, EEBO-TCP did not partner with universities in India or the Philippines, but hired multinational BPO companies that offer offshored services to clients in the United States and United Kingdom.

Misson and Singh assert that early modern scholars should defer to other researchers and refrain from speculating about the labor practices behind EEBO-TCP. While interdisciplinary collaboration with experts in other fields will certainly provide much needed perspectives and insights, I do not believe that scholars who use and benefit from EEBO-TCP can simply abdicate in the ‘absence of information’. If we limit our critiques of labor practices to the information that companies provide, it hardly incentivizes these companies to be transparent. Further, as Roopika Risam writes in her groundbreaking *New Digital Worlds*, ‘The legacies of colonialism that have been shaping knowledge production for centuries continue to prevail, and they do so through the existing state of the digital cultural record. Those of us who are equipped with the capacity for humanities inquiry have a responsibility to intervene’ (2018, 139). EEBO-TCP has fundamentally changed the study of early modern English texts, enabling new avenues for teaching and research – including my own research. I can distinctly remember joyful, *eureka* moments when EEBO-TCP enabled me to make a connection that enriched my research and shaped my understanding of the early modern world. I am an American scholar of early modern knowledge production and book history whose work has directly benefited from the keyers who hand-typed EEBO-TCP; in the present article, I rely on my training as a humanities scholar to read the TCP website against the grain to consider how the knowledge production of digital archives can replicate colonial epistemologies.

Central to my methodology, as well as the methodologies of many scholars whose work I admire, is the understanding that absences *are* information (see Hartman 2008 and 2019; Klein 2013; Fuentes 2016; Ozment 2020; Miles 2021). Offshoring, in particular, is a practice that thrives in absences. I join Herman, Misson, and Singh to advocate for greater transparency around EEBO-TCP’s keyers. At the same time, I recognize that the people behind EEBO-TCP may not even have information about the keyers’ wages, working conditions, or precarity, as offshoring companies often present themselves as a convenient black box that generates a desired output for a certain rate. In the absence of this information, however, I have chosen to examine how the TCP website presents the narrative of EEBO-TCP’s creation, attending to how the keyers’ role is discussed or elided. As Misson and Singh observe, EEBO-TCP’s use of offshoring is not a secret (2022, 525); at the same time, the language of the TCP website often omits or diminishes the project’s reliance both on the practice of offshoring and on the keyers’ central scholarly labor.

The TCP website asserts: ‘Our policies were imbued with a librarian’s attitude toward content: a resolve to prepare materials *without agenda or bias*’ (my italics).<sup>16</sup> This purported neutrality, of course, is itself an agenda, which imagines the role of a librarian or archivist as passive stewards – or even as the servile ‘handmaidens of historical research’ – rather than active agents in the construction of historical narratives (see Cook 2007, 170). In the case of EEBO in particular, Bonnie Mak expertly documents how its labor-intensive construction reflects particular political agendas, beginning with the Short Title Catalogue’s creation (2014; see also Gavin 2021).<sup>17</sup> Mak can only excavate part of EEBO’s history, noting a lack of transparency:

<sup>16</sup> ‘About the Partnership’, *Text Creation Partnership*, <<https://textcreationpartnership.org/about-the-tcp/>>, accessed 1 December 2024.

<sup>17</sup> Created at the beginning of the twentieth century, the Short Title Catalogue provided a framework for EEBO, and in turn, EEBO-TCP. Critiques of EEBO’s construction, including Mak’s, tend to focus on how it might uphold, rather than challenge, historical narratives of heritage and nation. Amy Earhart probes how digital archives, including EEBO, tend to focus ‘on technological innovation, not on innovative restructuring of the canon’ (2012, 314). Earhart



'In eliding the social processes that constitute the digitizations, not only are the politics of the final product in EEBO obscured, but so too is the possibility of a historical understanding of the project itself. [This] produces the effect of fact: The performance of EEBO becomes the performance of knowledge' (2014, 1520). EEBO, and subsequently EEBO-TCP, derives a supposed apolitical authority and unfettered access to the past by erasing the politics of its own creation. What is visible to an EEBO-TCP user (EEBO-TCP's content and presentation) is reliant on what is not visible (EEBO-TCP's use of offshored labor).<sup>18</sup>

Scholars from intersecting disciplines have considered how offshoring digital labor reinforces colonial pasts and neocolonial futures by obscuring the human labor necessary to create and maintain digital products. The digital not only means labor can be performed anywhere, but also conceals human intervention through real and supposed automation, including in social media content management (Cherry 2016; Roberts 2019), AI programming (Gray and Suri 2019; Perrigo 2023), and 'farming' in online games (Tai and Hu 2018). This phenomenon – called 'virtual work' (Cherry 2016, 71), 'ghost work' (Gray and Suri 2019, ix), 'masked labour' (Mak and Pollack 2013, 218), and 'artificial artificial intelligence' (by Jeff Bezos; see Jeff Bezos qtd. in Pontin 2007) – hides human labor within the supposed capacity of a machine, such that a user cannot differentiate between what is human- or computer-generated. It is no wonder that Amazon's marketplace for gig-based digital work is named the Mechanical Turk.<sup>19</sup> Amazon Mechanical Turk workers, necessary yet devalued, are paid pennies for completing tasks (Risam 2018, 130).

Risam discusses the use of Amazon Mechanical Turk within the digital humanities, arguing that, while digital humanists have considered the ethics of collaboration within the university, 'there has been less critical interrogation of the role of exploited and casualized labor from the Global South in propping up digital humanities projects of the Global North ... [and] the tension between fiscal challenges and ethical labor practices in the production of digital humanities scholarship' (44).<sup>20</sup> The digital collaborations of tenured scholars, precarious scholars, graduate students, undergraduates, librarians, and staff within universities requires conscientious conversations about positionality and power and clear agreements about how each person's work will be acknowledged and properly compensated.<sup>21</sup> While outsourced labor that is obscured by technology might seem like an easier alternative – as Lilly Irani observes, some users of Amazon Mechanical Turk describe the results as being 'like magic' (2015, n.p.) – the use of outsourcing and offshoring digital labor creates more numerous and greater ethical considerations.

The EEBO-TCP keyers' transcription and mark-up should not be understood as a human simply replacing the automated, monotonous work of a machine. Like other 'ghost work', the keyers are employed precisely because their skills, knowledge, and analysis are necessary; even if the work that they undertake is seemingly repetitive, it is not rote. Transcribing a black-and-white

considers how digital projects often receive funding for the supposed significance of their contents, and in turn, the traditional white, male, European canon is reproduced as the digital canon that can be easily accessed and queried.

<sup>18</sup> See also Mak 2016 on offshoring, labor, and the digital humanities.

<sup>19</sup> Amazon Mechanical Turk takes its name from an eighteenth-century chess-playing automaton, which was revealed to be a hoax: hidden within the machine was a human chess master who performed the machine's supposed tasks. Geoghegan 2020 provides an overview that traces orientalism from the chess-playing automaton to Amazon's Mechanical Turk. On how Amazon Mechanical Turk operates, see Hitlin 2016; Cherry 2016.

<sup>20</sup> Risam (2018) discusses the use of crowdsourced labor on digital marketplaces such as Amazon Mechanical Turk but does not specifically address the use of third-party BPO companies for digital archives or digital humanities projects.

<sup>21</sup> For examples of best practices and considerations for digital humanities projects navigating the power dynamics of collaboration within a university setting, see the 'Collaborators' Bill of Rights' 2011; 'A Student Collaborators' Bill of Rights' 2015; Risam, Snow and Edwards 2017.

scan of a microfilm of an early book is scholarly labor that requires interpretation, engagement, creativity and practice. Further, the keyers were tasked with the editorial work of XML mark-up. As Misson and Singh highlight, ‘the assigning of division types required many of the skills normally associated with textual editing. Besides letter-by-letter transcription, keyers were also applying historical and bibliographical knowledge to the analysis of early modern content and its context’ (2022, 514-515). And because (as mentioned above) EEBO-TCP’s editors completed quality checks on only 3-5% of the content, the overwhelming majority of EEBO-TCP has been shaped by the keyers’ editorial interpretation without any additional edits. Unequivocally, the keyers and their scholarly work are essential to EEBO-TCP – but their work is not credited or cited as such.

EEBO-TCP’s credited editors are situated within the United States and United Kingdom, rather than crediting India or the Philippines as primary locations of production. The TCP website only has one mention of the keyers’ location, at the bottom of ‘TCP Staff’: ‘Of all of the hundreds of keyers and coders, quality-control officers, and managers at Apex CoVantage (Hyderabad), SPI Global (formerly PDCC, Manila), Aptara (formerly Tech Books<sup>22</sup>), and AEL Data (Chennai) only a few can be named here.’<sup>23</sup> This passive voice obscures who is doing the naming and why this absence of information is occurring: is this information withheld by TCP’s vendors or was it simply not deemed important enough to keep track of individual keyers’ names? The entry names forty-three people, along with company affiliations and, sometimes, positions. All positions listed appear to be managerial roles, but since not every entry has a position, it is unclear if any keyers are listed.<sup>24</sup> At the very least, these forty-three people do not encompass the hundreds or thousands of keyers involved in typing and encoding EEBO-TCP.

While the vendors are not hidden, they are featured less prominently than editors located in the United States and United Kingdom. The website names the University of Michigan and Bodleian Library (alongside their locations, Ann Arbor and Oxford) on multiple pages, with a much earlier frequency, and higher frequency per page. Both appear on the welcome page and three times on *History*. Hundreds of workers affiliated with both universities are named above the vendor-affiliated workers on ‘TCP Staff’. From the FAQ to citation guidelines, the website continually asserts that ‘EEBO-TCP is a project based at the Universities of Michigan and Oxford’.<sup>25</sup> Even the citation guide for using EEBO-TCP recommends citing the location of creation as Ann Arbor, Michigan.<sup>26</sup> Other editorial sites, such as the University of Toronto and National Library of Wales, appear prominently and repeatedly.<sup>27</sup>

<sup>22</sup> While Apex CoVantage, SPi Global, and AEL Data all operate multiple office locations, specific locations in India and the Philippines are noted on the TCP website. Aptara, the only company that does not list a location, has three American, one Australian, and six Indian office locations (‘TCP Staff’, *Text Creation Partnership*, <<https://textcreationpartnership.org/about-the-tcp/tcp-staff/>>, accessed 1 December 2024; ‘Offices’, *Aptara Corp.*, <<https://www.aptaracorp.com/about-us/offices/>>, accessed 1 December 2024).

<sup>23</sup> ‘TCP Staff’, *Text Creation Partnership*, <<https://textcreationpartnership.org/about-the-tcp/tcp-staff/>>, accessed 1 December 2024.

<sup>24</sup> Additionally, the ‘TCP Staff’ page was first captured by the *Wayback Machine* in late 2019, which coincides with TCP website template update; prior to the end of 2019, it is unclear what references the website contained to its third-party vendors and their locations, if any.

<sup>25</sup> ‘FAQ’, *Text Creation Partnership*, <<https://textcreationpartnership.org/faq/>>, accessed 1 December 2024. The TCP website is especially important because it acts as a source for other versions of EEBO-TCP history. The Wikipedia page for TCP lists the locations of editors but does not mention the use of vendors. Gavin’s thirtyfour-page history of EEBO includes a single footnote: ‘Transcriptions were performed by anonymous coders working in India’ (2021, 99).

<sup>26</sup> ‘Citing the TCP – Text Creation Partnership’, *Text Creation Partnership*, <<https://textcreationpartnership.org/using-tcp-content/citing-the-tcp/>>, accessed 1 December 2024.

<sup>27</sup> The University of Toronto and the National Library of Wales served as editorial sites for texts written in Latin and Welsh respectively. Both institutions are listed twice in the history of the project, once on the ‘About

Further, as Misson and Singh observe, individual keyers are not credited in the XML files that make up EEBO-TCP, even though editors' names are included within these files: 'While the US- or UK-based editor is often named in the XML header, the keyer remains anonymous – a contravention of the system of acknowledgement and citation otherwise used for scholarly labor, and one which we hope will be duly addressed in future iterations of the EEBO-TCP project' (2022, 525). Of course, this is only a contravention if and when the keyers' labor is rightly understood as scholarly. The discrepancy in who is credited within EEBO-TCP's files signals that the keyer's transcription and mark-up is not understood as scholarly labor, even as the editor's identical work of transcription and mark-up *is* understood as scholarly labor. This raises interlinking questions of whose labor is typically perceived as scholarly and where scholarly labor is typically located: the editors affiliated with academic institutions in the United States or United Kingdom are credited for their scholarly contributions, while the keyers located in India and the Philippines are relegated to uncredited, supporting roles. This is especially troubling given the neocolonial and techno-Orientalist stereotypes that imagine Asian workers as machine-like and adept at repetitive and monotonous tasks (Lowe 2014; Bui 2020). Within neocolonial epistemologies, the location and racialized identity of the person completing a task shapes whether or not that task should be understood as knowledge production.<sup>28</sup>

Not only are individual keyers not credited, but often, when their work is referenced on the TCP website, it is through the collective 'vendor'. Production manager Paul Schaffner notes that EEBO-TCP has 'never seen any point in specifying a particular \*method\* (and indeed some of the commercial processes are proprietary secrets): we specify a given accuracy of output, and leave it to the vendors'.<sup>29</sup> Outsourcing is a technology that emphasizes product over process. These 'proprietary secrets' of *how* a vendor accomplishes this output also blur the *who*, the hierarchal structures and individuals who create the output. The language of 'vendor' is a catch-all synecdoche for the collective, flattening the identities and roles of individuals and the complex power relations between them. For example, Mattie Burkert observes that in a video tour of Apex CoVantage's Hyderabad office available on YouTube, the 'engineers, supervisors, and managers appear to be men, while the cubicle farm referred to as the "production floor" is populated predominantly (although not exclusively) by women' (2023, 498). An individual keyers' experience within a multinational corporation is not the same as a manager, nor is a manager's experience the same as a CEO. And yet, this collective 'vendor' takes on human form: 'vendors who manually key in the letters they see on the page'.<sup>30</sup>

Elsewhere, the vendors are folded into a larger collective. Instead of individuals or vendors keying, the ambiguous 'we' is credited with transcription:

EEBO-TCP' page (*Text Creation Partnership*, <<https://textcreationpartnership.org/tcp-texts/eebo-tcp-early-english-books-online/>>, accessed 1 December 2024), and multiple times on the 'TCP Staff' page (*Text Creation Partnership*, <<https://textcreationpartnership.org/about-the-tcp/tcp-staff/>>, accessed 1 December 2024).

<sup>28</sup> The question of whose labor is valued and recognized as scholarly exists at the intersections of identity, including race, nationality, gender and class. For example, the #ThanksForTyping movement called attention to how women's scholarly contributions, ranging from transcription to computing, are often overlooked (see Light 1999; Dresvina 2021).

<sup>29</sup> The quotation from Schaffner appears in an Association for Computers and the Humanities' forum post to answer a colleague's question about whether any studies have shown the effectiveness of double-keying. 'Verifying the Accuracy of Double Keying - any studies?', 'Digital Humanities Questions & Answers', *Association for Computers and the Humanities*, <<https://dhanswers.ach.org/topic/verifying-the-accuracy-of-double-keying-any-studies/>>, accessed 1 December 2024.

<sup>30</sup> 'The Results of Keying Instead of OCR', *Text Creation Partnership*, <<https://textcreationpartnership.org/using-tcp-content/results-of-keying/>>, accessed 1 December 2024.



We are a consortium of (mostly) university and college libraries ... We've transcribed and marked up text – through manual keying, rather than optical character recognition (OCR) ...<sup>31</sup>

Because our funding was limited, we aimed to key as many different works—as much different text—as possible.<sup>32</sup>

... we preferred to reserve our energies for keying and editing rather than original cataloguing.<sup>33</sup>

While the use of 'we' is not necessarily a purposeful evasion, it is also not innocuous. Even when 'we' self-identifies as the consortium, it takes credit for transcribing EEBO-TCP, making transcription sound like an in-house production. 'Our funding' demonstrates that this 'we' exerts fiscal control over the project, further separating 'we' from keyers, but 'reserv[ing] our energies for keying' creates a collective entity that includes those who engage in the manual labor of keying. The shifting scope of who this 'we' includes and omits seems to credit EEBO-TCP partners in the United States and United Kingdom not only with EEBO-TCP's production, but the act of keying itself.

Ruha Benjamin warns that the language of exploitation focuses on intentions and outcomes, rather than the costs of exploitation:

If we probe exploitative labor practices, the stated intention would likely elicit buzzwords such as "lower costs" and "greater efficiency", signaling a fundamental tension and paradox – the indispensable disposability of those whose labor enables innovation. The language of intentionality only makes one side of this equation visible, namely the desire to produce goods faster and cheaper, while giving people "the opportunity to work". This fails to account for the social costs of a technology in which global forms of racism, caste, class, sex, and gender exploitation are the nuts and bolts of development. (2019, 20)

Benjamin's 'indispensable disposability' is underscored in language that centers the point-of-view of the exploiter over the exploited and the product over the people who create that product. The neoliberal narrative that frames offshoring as an 'opportunity to work' is better inverted as 'an opportunity for the West' (Pal and Buzzanell 2013, 211), as lower costs and greater efficiency are indispensable to the companies that rely on them. Simply put: EEBO-TCP relies on the keyers, not the other way around.

Without naming offshoring, the TCP website argues that keying is essential to the project's affordability and efficiency:

[Keying] is actually more cost effective than sorting through and correcting poor-quality OCR.<sup>34</sup>

We maintain a commitment to the quality and the cost-effectiveness of our content ...<sup>35</sup>

The review and correction of the text produced would be so expensive and labor-intensive that it is more efficient to simply key the work from scratch.<sup>36</sup>

<sup>31</sup> 'About the Partnership', *Text Creation Partnership*, <<https://textcreationpartnership.org/about-the-tcp/>>, accessed 1 December 2024.

<sup>32</sup> 'About EEBO-TCP', *Text Creation Partnership*, <<https://textcreationpartnership.org/tcp-texts/eebo-tcp-early-english-books-online/>>, accessed 1 December 2024.

<sup>33</sup> *Ibid.*

<sup>34</sup> 'Results of Keying instead of OCR', *Text Creation Partnership*, <<https://textcreationpartnership.org/using-tcp-content/results-of-keying/>>, accessed 1 December 2024.

<sup>35</sup> 'About the Partnership', *Text Creation Partnership*, <<https://textcreationpartnership.org/about-the-tcp/>>, accessed 1 December 2024.

<sup>36</sup> 'FAQ', *Text Creation Partnership*, <<https://textcreationpartnership.org/faq/>>, accessed 1 December 2024.

These are only some of the instances that invoke concerns of cost and efficiency; this rationale stresses EEBO-TCP's dependence on the lower rates that offshoring provides. The unspoken addition is that not only were keyers essential to EEBO-TCP, but keyers located in countries formerly colonized by the United Kingdom and United States made the project's scope possible through their high-quality, low-cost scholarly labor.

What does it mean that EEBO-TCP, a searchable database based on 'a mainstay for understanding the development of Western culture in general and the Anglo-American world in particular',<sup>37</sup> was constructed by thousands of people in countries formerly colonized by the United Kingdom and United States? Ironically, EEBO-TCP is an archive of the ideas and worldviews that helped to bring about the 'Anglo-American world' – a euphemism for colonialism and the cultural imperialism – that established English as a global language. Indeed, scholars such as Jyotsna Singh (1996 and 2019), Ania Loomba (Loomba and Orkin 1998; Loomba and Sanchez 2016), Imtiaz Habib (2000), Poonam Trivedi (Trivedi and Bartholomeusz 2005; Lei, Ick and Trivedi 2016), Bernadette Andrea (2008) and Amrita Sen (2022) have explored how early modern English texts articulated and propelled colonial ambitions and epistemologies. Ongoing digital projects, including Al-Azami and Hassan's *Medieval and Early Modern Orients*<sup>38</sup> and Dhar, Sen and Adéékó's *Shakespeare in the 'Post' Colonies*, offer innovative research that examines cross-cultural and colonial exchanges across geographical and temporal boundaries. By replicating early modern texts in the digital cultural record, EEBO-TCP also duplicates the racist and colonial worldviews contained within these texts without the critical context that these scholars provide.

For example, Thomas Carew's 'A Fancy' (1651) triangulates geography, race, and paper in order to uphold European whiteness as the necessary background for knowledge production. At the beginning of the poem, Carew admires a piece of paper:

Mark how this polisht Eastern sheet  
Doth with our Northern tincture meet,  
For though the paper seem to sink,  
Yet it receives, and bears the Ink;  
And on her smooth soft brow these spots  
Seem rather ornaments than blots;  
... to speak  
To the skild Lover, and relate  
Vnheard, his sad or happy Fate: (ll. 1-6 and 10-12)

Carew compares the piece of paper to a fair woman's face, praising how the page's whiteness, contrasted with the darkness of the ink, enables the 'skild Lover' to read and interpret meaning. Carew plays on the meanings of tincture, referring to both a cosmetic pigment to whiten the face and an alchemical quintessence capable of purification. As this 'Northern tincture' whitens and perfects the 'Eastern' technology of paper, whiteness and perfection are made synonymous. Carew is by no means singular in how he conflates paper's virtuous whiteness and racialized skin (see Grier 2015; Adams 2021), and numerous early modern English texts reproduced in EEBO-TCP correlate whiteness, beauty, and virtue (see Hall 1995). Carew's 'Eastern sheet' seems to denote paper's invention in China; however, rather than seeing European textual traditions

<sup>37</sup> 'About EEBO-TCP', *Text Creation Partnership*, <<https://textcreationpartnership.org/tcp-texts/eebo-tcp-early-english-books-online/>>, accessed 1 December 2024.

<sup>38</sup> See <<https://memorient.com/>>, accessed 1 December 2024.

as interlinked or indebted to Asian technologies, Carew introduces the ‘Eastern sheet’ in order to emphasize the superiority of its ‘Northern’ counterpart. In this, Carew’s poem proposes that legibility and meaning-making are contingent on European whiteness.

When Carew’s poem is reinscribed in EEBO-TCP, this proposition takes on new temporal and epistemic registers: EEBO-TCP is reproducing a history of colonial violence in more ways than one. EEBO-TCP’s construction relies on the prevalence of English-speaking workers in formerly colonized countries as well as the global economic infrastructures that continue to allow countries like the United Kingdom and United States to benefit from skilled, inexpensive labor from countries they previously colonized. This extractive labor is a further instance of cultural imperialism wherein the digital cultural record of ‘Western culture’ is reproduced by English-speaking people in formerly colonized countries. In this, EEBO-TCP both extracts and erases the labor of keyers in India and the Philippines, perpetuating a colonial epistemology that imagines knowledge production, past and present, as solely the product of European and settler-colonial countries.

It is important to remember that EEBO-TCP is not an anomaly; rather, its construction represents larger trends within academia and digital labor. In fact, these technologies and labor practices are commonplace within academia; to pick just one example, the *London Stage Information Bank* was keypunched by women based in Hong Kong (see Burkert 2022, 179-180 and 2023). And many publishing companies employ the same or similar BPO companies for transcription, typesetting, formatting, and copywriting services in producing academic monographs.<sup>39</sup> Further, new technologies like generative AI, often touted as an alternative to human labor, also can rely on offshored and exploitative labor (Perrigo 2023). While EEBO-TCP is no longer actively transcribing texts, it is presented as ‘a model for future collaborations’ (Blumenstyk 2001, n.p.) that gestures towards future digital humanities projects. Our concerns about exploitative academic labor cannot begin and end with EEBO-TCP.

It has been over a decade since Alan Liu asked: ‘how ... the digital humanities advance, channel, or resist the great postindustrial, neoliberal, corporatist, and globalist flows of information-cum-capital?’ (2011, n.p.). Scholars of critical digital humanities and critical archival studies<sup>40</sup> have sought to answer this question by imagining new avenues and new possibilities wherein digital archives do not reinscribe colonial epistemologies. As their research indicates, it is not enough simply to ‘diversify’ the records contained within digital archives, but instead, we need to fundamentally change the approaches, methods, relationships, and epistemological frameworks of digital archives (see Caswell, Punzalan, and Sangwand 2017; Carbajal and Caswell 2021). Risam advocates for a postcolonial digital humanities that ‘explores how we might remake the worlds instantiated in the digital cultural record through politically, ethically, and social justice-minded approaches to digital knowledge production’ (2018, 4). Kimberly Christen and Jane Anderson center Indigenous temporalities and relationalities to imagine the ‘slow archives’ as an alternative temporal framework that resists settler colonial logics:

Slowing down is about focusing differently, listening carefully, and acting ethically. It opens the possibility of seeing the intricate web of relationships formed and forged through attention to collaborative curation processes that do not default to normative structures of attribution, access, or scale ... [S]lowness is imagined

<sup>39</sup> Apex CoVantage clients include JSTOR and Taylor & Francis; SPi Global clients include Elsevier, Wiley, Oxford University Press and Cambridge University Press; Aptara clients include Google, Cengage Learning, Houghton Mifflin Harcourt and Penguin Random House; AEL Data clients include the University of Cambridge and the Library and Archives of Canada. All clients are listed on the respective vendors’ websites.

<sup>40</sup> See Nakamura 2011 and 2014; Mak 2013 and 2014; Williams 2016 and 2017; D’Ignazio and Klein 2020; Carbajal and Caswell 2021; and also the collective movement that goes by the hashtag #transformDH (see Bailey *et al.* 2016).

and enacted in terms of relationality, positionality, and a framework that privileges restorative and reparative work that is decolonial in its logic and practice. Slow archives do not presume one course of action; in fact, they allow for changing courses, for shifts, and for unexpected endings. (2019, 90)

How might these insights and changes in perspective shape early modern studies in new directions? It would require that early modern scholars who create or use digital projects, including archives, bring the labor of knowledge production to the forefront of our research and teaching. In practice, this could include centering labor practices in our discussions, challenging exploitative labor practices, and implementing ethical and innovative approaches to digital projects instead of relying on offshored labor. After all, even as scholars advocate for greater transparency around or research on EEBO-TCP's use of BPO companies, it is important to keep in mind that these companies' lack of transparency is not an accident but by design. Ultimately, offshoring academic labor may ensure cost-efficiency for large-scale digital projects, but it cannot ensure that workers have fair pay or job security.

Early modern scholars can also bring labor to the forefront by acknowledging the web of relationships that is foundational to our work as researchers and educators, including the labor that is not recognized by traditional citational practices or scholarly attributions. In this, Kate Ozment (2020) and Bridget Whearty (2022) both offer insightful, innovative models on how acknowledging the scholarly work of anonymous individuals past and present can expand our narratives of scholarly labor. Scholars who use EEBO-TCP in their research and classrooms should intentionally acknowledge and discuss EEBO-TCP's construction in ways that center the integral, scholarly labor of keyers.

Labor, too, must be at the forefront of ongoing and future projects: the outcome of *what is being made* does not and cannot outweigh the circumstances of *who is doing the making*. This is a simple premise, and at the same time, it is deeply antithetical to academia in its current state. It means having less when having more could mean exploiting other people – but in practice, it often just means *having less*, whether in terms of documents, metadata, and user-experience features to work with. Instead of mourning this hypothetical data, however, perhaps this reframing can also be an opportunity to interrogate the value placed on large-scale, 'big data' digital humanities projects in the first place.

What would it look like if early modern scholars *focused differently, listened carefully, and acted ethically*? Our work is pertinent and political. We must endeavor to call attention to how colonialism and racism shape our field specifically and knowledge production more broadly. With that, we must seek to resist the universalization of Anglo-American epistemologies and reject completionist fantasies that imagine that any single archive or digital project, regardless of scale, can give us unfettered access to the past. Only then can we learn from and work slowly, yet urgently (see Caswell 2021, 99-100), and collaboratively with scholars from across disciplines, librarians, students and partners outside of the academy to imagine new ways of knowing.

#### Works Cited

- Adams B.K (2021), 'Fair/Foul', in C.M.L. Bourne, ed., *Shakespeare/Text: Contemporary Readings in Textual Studies, Editing and Performance*, London, New York, Oxford, New Delhi and Sidney, Bloomsbury Publishing, 29-49.
- Andrea Bernadette (2008), *Women and Islam in Early Modern English Literature*, Cambridge, Cambridge University Press.
- 'A Student Collaborators' Bill of Rights' (2015), *Humanities Technology UCLA*, <<https://humtech.ucla.edu/news/a-student-collaborators-bill-of-rights/>>, accessed 1 December 2024.

- Bailey Moya, Anne Cong-Huyen, Alexis Lothian and Amanda Phillips (2016), 'Reflections on a Movement: #transformDH, Growing Up,' in L.F. Klein and M.K. Gold, eds, *Debates in the Digital Humanities*, Minneapolis, University of Minnesota Press, 71-80, <<https://dhdebates.gc.cuny.edu/projects/debates-in-the-digital-humanities-2016/>>, accessed 1 December 2024.
- Benjamin Ruha (2019), *Race After Technology: Abolitionist Tools for the New Jim Code*, Cambridge and Medford, Polity Press.
- Bi-qi B.L., J.C. Ick and Poonam Trivedi, eds (2017 [2016]), *Shakespeare's Asian Journeys: Critical Encounters, Cultural Geographies, and the Politics of Travel*, New York and London, Routledge.
- Blaney Jonathan and Judith Siefring (2017), 'A Culture of Non-Citation: Assessing the Digital Impact of British History Online and the Early English Books Online Text Creation Partnership', *Digital Humanities Quarterly* 11,1, n.p., <<https://www.digitalhumanities.org/dhq/vol/11/1/000282/000282.html>>, accessed 1 December 2024.
- Blumenstyk Goldie (2001), 'A Project Seeks to Digitize Thousands of Early English Texts', *The Chronicle of Higher Education*.
- Bui Long (2020), 'Asian Roboticism: Connecting Mechanized Labor to the Automation of Work', *Perspectives on Global Development & Technology* 19, 1-2, 110-126, doi: 10.1163/15691497-12341544.
- Burkert Mattie (2022), 'Materialisms and the Cultural Turn in Digital Humanities', in M. Vareschi and H. Wacha, eds, *Intermediate Horizons: Book History and Digital Humanities*, Madison, University of Wisconsin Press, 167-184.
- Burkert Mattie (2023), 'From Manual to Digital: Women's Hands and the Work of Eighteenth-Century Studies', *Studies in Eighteenth-Century Culture* 52, 1, 491-516.
- Cadbury H.J. (1968), 'Briefer Notices', *Quaker History* 57, 1, 59-62.
- Carbajal I.A. and Michelle Caswell (2021), 'Critical Digital Archives: A Review from Archival Studies', *The American Historical Review* 126, 3, 1102-1120, doi: 10.1093/ahr/rhab359.
- Carew Thomas (1651), *Poems. With a Maske...*, London, Printed for Humphrey Moseley.
- Caswell Michelle (2021), *Urgent Archives: Enacting Liberatory Memory Work*, New York, Routledge.
- Caswell Michelle, Ricardo Punzalan and T-Kay Sangwand (2017), 'Critical Archival Studies: An Introduction', *Journal of Critical Library and Information Studies* 1, 2, 1-8, doi: 10.24242/jclis.v1i2.50.
- Cherry M.A. (2016), 'Virtual Work and Invisible Labor', in M.G. Crain, W.R. Poster and M.A. Cherry, eds, *Invisible Labor: Hidden Work in the Contemporary World*, Oakland, University of California Press, 71-86.
- Christen Kimberly and Jane Anderson (2019), 'Toward Slow Archives', *Archival Science* 19, 2, 87-116.
- 'Collaborators' Bill of Rights' (2011), *Media Common Press*, <<https://mcpres.media-commons.org/offthetracks/part-one-models-for-collaboration-career-paths-acquiring-institutional-support-and-transformation-in-the-field/a-collaboration/collaborators%E2%80%99bill-of-rights>>, accessed 1 December 2024.
- Cook Terry (2007), 'Remembering the Future: Appraisal of Records and the Role of Archives in Constructing Social Memory', in F.X. Blouin Jr. and W.G. Rosenberg, eds, *Archives, Documentation and Institutions of Social Memory: Essays from the Sawyer Seminar*, Ann Arbor, University of Michigan Press, 169-181.
- D'Ignazio Catherine and L.F. Klein (2020), *Data Feminism*, Cambridge, The Massachusetts Institute of Technology Press.
- Dhar Amrita, Amrita Sen and Adélékè Adéèkó (2023), 'Shakespeare in the 'Post' Colonies and Postcolonial Shakespeares at Work', *Shakespeare in the Post Colonies*, <<https://u.osu.edu/shakespearepostcolonies/>>, accessed 1 December 2024.
- Dresvina Juliana, ed. (2021), *Thanks for Typing: Remembering Forgotten Women in History*, New York, Bloomsbury Publishing.
- Earhart A.E. (2012), 'Can Information Be Unfettered? Race and the New Digital Humanities Canon', in M.K. Gold, ed., *Debates in the Digital Humanities*, Minneapolis and London, University of Minnesota Press, 309-318.
- Fuentes M.J. (2016), *Dispossessed Lives: Enslaved Women, Violence, and the Archive*, Philadelphia, University of Pennsylvania Press.



- Gadd Ian (2009), 'The Use and Misuse of *Early English Books Online*', *Literature Compass* 6, 3, 680-692.
- Gavin Michael (2021), 'EEBO and Us', *Textual Cultures: Texts, Contexts, Interpretation* 14, 1, 270-278, <<https://scholarworks.iu.edu/journals/index.php/textual/article/view/32860/36837>>, accessed 1 December 2024.
- Geoghegan B.D. (2020), 'Orientalism and Informatics: Alterity from the Chess-Playing Turk to Amazon's Mechanical Turk', *Ex-Position* 43, 45-90, doi: 10.6153/EXP.202006\_(43).0004.
- Gray M.L. and Siddharth Suri (2019), *Ghost Work: How to Stop Silicon Valley from Building a New Global Underclass*, Boston and New York, Houghton Mifflin Harcourt.
- Grier M.P. (2015), 'Inkface: The Slave Stigma in England's Early Imperial Imagination', in V.L. Wimbush, ed., *Scripturalizing the Human: The Written as Political*, New York and London, Routledge, 193-220.
- Habib Imtiaz (2000), *Shakespeare and Race: Postcolonial Praxis in the Early Modern Period*, Lanham, New York and Oxford, University Press of America.
- Hall K.F. (1995), *Things of Darkness: Economies of Race and Gender in Early Modern England*, Ithaca and London, Cornell University Press.
- Hartman Saidiya (2008), 'Venus in Two Acts', *Small Axe* 12, 2, 1-14.
- Hartman Saidiya (2019), *Wayward Lives, Beautiful Experiments: Intimate Histories of Social Upheaval*, New York and London, W.W. Norton & Company.
- Herman P.C. (2020), 'EEBO and Me: An Autobiographical Response to Michael Gavin, "How to Think About EEBO"', *Textual Cultures* 13, 1, 207-216, <[https://www.academia.edu/43138188/EEBO\\_and\\_Me\\_An\\_Autobiographical\\_Response\\_to\\_Michael\\_Gavin\\_How\\_to\\_Think\\_About\\_EEBO\\_](https://www.academia.edu/43138188/EEBO_and_Me_An_Autobiographical_Response_to_Michael_Gavin_How_to_Think_About_EEBO_)>, accessed 1 December 2024.
- Hitlin Paul (2016), 'Research in the Crowdsourcing Age, a Case Study ...', *Pew Research Center*, 11 July, <[https://www.pewresearch.org/internet/wp-content/uploads/sites/9/2016/07/PI\\_2016.07.11\\_Mechanical-Turk\\_FINAL.pdf](https://www.pewresearch.org/internet/wp-content/uploads/sites/9/2016/07/PI_2016.07.11_Mechanical-Turk_FINAL.pdf)>, accessed 1 December 2024.
- Irani Lilly (2015), 'Justice for "Data Janitors"', *Public Books*, 15 January, <<https://www.publicbooks.org/justice-for-data-janitors/>>, accessed 1 December 2024.
- Kichuk Diana (2007), 'Metamorphosis: Remediation in *Early English Books Online* (EEBO)', *Literary and Linguistic Computing* 22, 3, 291-303.
- Klein L.F. (2013), 'The Image of Absence: Archival Silence, Data Visualization, and James Hemings', *American Literature* 85, 4, 661-688.
- Lei Bi-qi Beatrice, Judy Celine Ick and Poonam Trivedi, eds (2016), *Shakespeare's Asian Journeys: Critical Encounters, Cultural Geographies, and the Politics of Travel*, New York, Routledge.
- Lesser Zachary (2019), 'Xeroxing the Renaissance: The Material Text of Early Modern Studies', *Shakespeare Quarterly* 70, 1, 3-31.
- Light J.S. (1999), 'When Computers Were Women', *Technology and Culture* 40, 3, 455-483.
- Liu Alan (2011), 'Where Is Cultural Criticism in the Digital Humanities?', January 7, <<https://liu.english.ucsb.edu/where-is-cultural-criticism-in-the-digital-humanities/>>
- Loomba Ania and Martin Orkin, eds (1998), *Post-Colonial Shakespeares*, London and New York, Routledge.
- Loomba Ania and M.E. Sanchez (2016), 'Feminism and the Burdens of History', in Eadd., eds, *Rethinking Feminism in Early Modern Studies: Gender, Race, and Sexuality*, London and New York, Routledge, 15-41.
- Lowe Annie (2014), *Narratives of Technological Globalization and Outsourced Call Centers in India: Droids, Mimic Machines, Automaton, and Bad 'Borgs'*, MA Thesis, University of Kansas.
- Mak Bonnie (2014), 'Archaeology of a Digitization', *Journal of the Association for Information Science & Technology* 65, 8, 1515-1526.
- Mak Bonnie (2016), 'Confessions of a Twenty-First-Century Memsahib: The Offshore Sweatshops of the Digital Humanities', Paper Presented to the MLA Annual Conference.
- Mak Bonnie and Julia Pollack (2013), 'The Performance and Practice of Research in *A Cabinet of Curiosity: The Library's Dead Time*', *Art Documentation: Journal of the Art Libraries Society of North America* 32, 2, 202-221.
- Miles Tiya (2021), *All That She Carried: The Journey of Ashley's Sack, a Black Family Keepsake*, New York, Random House Publishing Group.

- Misson James (2021), 'Signifying Nothing', *Inscription: The Journal of Material Text – Theory, Practice, History* 2, 62-73.
- Misson James and Devani Singh (2022), 'Computing Book Parts with EEBO-TCP', *Book History* 25, 2, 503-529, <<https://archive-ouverte.unige.ch/unige:165508>>, accessed 1 December 2025.
- Nakamura Lisa (2011), 'Economies of Digital Production in East Asia: iPhone Girls and the Transnational Circuits of Cool', *Media Fields Journal* 2, 1-10 <<https://mediafieldsjournal.org/economies-of-digital/>>, accessed 1 December 2024.
- Nakamura Lisa (2014), 'Indigenous Circuits: Navajo Women and the Racialization of Early Electronic Manufacture', *American Quarterly* 66, 4, 919-941.
- Ozment Kate (2020), 'Rationale for Feminist Bibliography', *Textual Cultures* 13, 1, 149-178, doi: 10.14434/textual.v13i1.30076.
- Pal Mahuya and P.M. Buzzanell (2013), 'Breaking the Myth of Indian Call Centers: A Postcolonial Analysis of Resistance', *Communication Monographs* 80, 2, 199-219.
- Perrigo Billy (2023), 'Exclusive: OpenAI Used Kenyan Workers on Less Than \$2 Per Hour to Make ChatGPT Less Toxic', *TIME*, January 18, <<https://time.com/6247678/openai-chatgpt-kenya-workers/>>, accessed 1 December 2024.
- Phillips Daniel (1700), *Proteus Redivivus*..., London, Printed and sold by T. Sowle.
- Pontin Jason (2007), 'Artificial Intelligence, With Help From the Humans', *The New York Times*, 25 March.
- Risam Roopika (2018), *New Digital Worlds: Postcolonial Digital Humanities in Theory, Praxis, and Pedagogy*, Evanston, Northwestern University Press.
- Risam Roopika et al. (2021), 'An Invitation towards Social Justice in the Digital Humanities', *Social Justice and the Digital Humanities*, <<http://criticaldh.roopikarisam.com/>>, accessed 1 December 2024.
- Risam Roopika, Justin Snow and Susan Edwards (2017), 'Building an Ethical Digital Humanities Community: Librarian, Faculty, and Student Collaboration', *College & Undergraduate Libraries* 24, 2-4, 337-349.
- Roberts S.T. (2019), *Behind the Screen: Content Moderation in the Shadows of Social Media*, New Haven and London, Yale University Press.
- Sen Amrita, ed. (2022), *Digital Shakespeares from the Global South*, Cham, Palgrave Macmillan.
- Singh J.G. (1996), *Colonial Narratives/Cultural Dialogues: 'Discoveries' of India in the Language of Colonialism*, London and New York, Routledge.
- Singh J.G. (2019), *Shakespeare and Postcolonial Theory*, London, Bloomsbury Arden Shakespeare.
- Tai Zixue and Fengbin Hu (2018), 'Play between Love and Labor: The Practice of Gold Farming in China', *New Media & Society* 20, 7, 2370-2390.
- Trettien W.A. (2013), 'A Deep History of Electronic Textuality: The Case of *English Reprints John Milton Areopagitica*', *Digital Humanities Quarterly* 7, 1, n.p., <<https://www.digitalhumanities.org/dhq/vol/7/1/000150/000150.html>>, accessed 1 December 2024.
- Trivedi Poonam and Dennis Bartholomeusz, eds (2005), *India's Shakespeare: Translation, Interpretation, and Performance*, Newark, University of Delaware Press.
- Welzenbach Rebecca (2012), 'Transcribed by Hand, Owned by Libraries, Made for Everyone: EEBO-TCP in 2012', *University of Michigan Library: Deep Blue Documents*, 17 September, <<http://deepblue.lib.umich.edu/handle/2027.42/94307>>, accessed 1 December 2024.
- Whearty Bridget (2022), *Digital Codicology: Medieval Books and Modern Labor*, Stanford, Stanford University Press.
- Williams Stacie (2016), 'Implications of Archival Labor: If We Want Respect for Our Labor, We Need to Value it More', *Medium*, 11 April, n.p., <<https://medium.com/on-archivy/implications-of-archival-labor-b606d8d02014>>, accessed 1 December 2024.
- Williams Stacie (2017), 'Sustainable Digital Scholarship: Shrinking our Footprint, Broadening our Impact', *Medium*, 5 October, n.p., <<https://medium.com/on-archivy/sustainable-digital-scholarship-the-limitations-of-space-662627e19e37>>, accessed 1 December 2024.