The Affordances of the Book: A Case Study of the Glastonbury Miscellany (Trinity College, Cambridge, MS 0.9.38) and its Digital Remediation

Abstract: This essay argues that recent work on *affordances* provides a potentially valuable theoretical tool for thinking across the history of the medieval manuscript, from the making and remaking of the codex to the intricacies of its digital remediation. It does so via a discussion of the origins and eventful life of the Glastonbury Miscellany (Trinity College, Cambridge, MS O.9.38). Originally compiled at Glastonbury Abbey, the manuscript was transported to London after the Reformation, where it became part of a new network of reading and use. In the first part of the discussion, I frame the varied additions to the manuscript in the sixteenth century by way of recent work on affordances by scholars in the field of communication studies. The second half of the discussion turns to the history of the digital Glastonbury Miscellany and to the affordances of the interface through which users now read and study it. Following some of the threads from this part of the discussion, I close by reflecting on how scholarly resources and activities are nested—or perhaps more accurately, entrapped—within large corporations' attempts to capitalise users' behavioural data and to enclose and monopolise digital space.

Trinity College, Cambridge, MS O.9.38 is a diverse collection of texts in English and Latin originally compiled at the Benedictine abbey at Glastonbury. The manuscript dates to around the middle of the fifteenth century, though it is also a particularly good example of how the eventful lives of things, and of books in particular, often traverse the medievalearly modern divide. The Glastonbury Miscellany collates multiple intentions and temporalities, calling into question any straightforward designation of the manuscript as a "medieval" object. Transported to London after the Reformation, its empty leaves and spaces were used by a later owner to record new texts. At the same time as they were adding new material to the manuscript, this later owner was also codifying and elaborating its existing contents, emending textual errors, supplying titles where they were absent, and adding various marginal glosses and notes. Unfortunately, though, the full extent of their additions is impossible to reconstruct, due to the extensive damage sustained by the manuscript in the sixteenth and seventeenth centuries. Originally loosely bound in a soft vellum cover, the manuscript seems to have been a portable and dynamic object; however, without the protection of a hard cover, it was also vulnerable to damage. When the manuscript was repaired and rebound in 1969, its paper leaves, many of which are badly frayed and water damaged, were carefully mounted on archival paper.

This essay takes the Glastonbury Miscellany as a particularly good opportunity to think through some of the historical, conceptual, and material issues posed by the "medieval" book, its modern repair, and its digital remediation. In the first section, I explore the complex temporalities of the manuscript and consider how recent work on affordances might provide an effective way to frame its later additions and restoration. In the second half of the discussion, I turn to the manuscript's remediation. Originally digitised in the mid 2000s as part of a project based at the Cambridge University English Faculty and funded by the Arts and Humanities Research Council (AHRC), the manuscript has had a relatively long digital life, but also an eventful one. Affordances, I argue, provide a critical and theoretical tool to think across the manuscript's forms, from the codex to its digital remediation and the interfaces through which users access it. Following some of the threads from this part of the discussion, I close by reflecting on how scholarly resources and activities are now nested—or perhaps more accurately, entrapped—within large corporations' attempts to capitalise users' behavioural data and to enclose and monopolise digital space. The essay therefore engages not only with recent discussions around the longevity and obsolescence of digital scholarly resources, but also with broader discussions around infrastructures and academic labour, topics which have assumed additional importance in the wake of the COVID-19 pandemic.

<u>A blank book</u>

The Glastonbury Miscellany is a distinctive late medieval book. Its paper leaves—which measure approximately 29.5cm by 10.5cm—are folded in "vertical' quarto," to adopt Orietta Da Rold's preferred description of a format that is often referred to in scholarship

as a "holster book."¹ The vertical quarto format is closely associated with account keeping and other administrative practices, for which paper had been adopted by many English institutions by the middle of the fourteenth century or earlier.² Fol. 1v of the manuscript does includes a list of accounts for the Abbey, though these are now largely illegible due to the later water damage. Beginning on fol. 2r, a range of literary and practical texts were added to its blank leaves, additions that reflect "the extremely varied (and at times surprisingly secular) literary tastes of a fifteenth-century monk or other associate of the Abbey," in Sara Harris's description.³ These additions begin with the popular twelfthcentury Latin dream vision Apocalypsis goliæ and include the dream allegory Gregory's Garden, the Stores of the City (a verse description of seven English cities in Latin but incorporating English toponyms), two parodic and grimly enthusiastic hymns on the execution of Piers Gaveston, The Feat of Gardeninge (a verse guide to the planting, grafting, and maintenance of plants and trees), Bruno Latini's Latin translation of the tale of Gusicardo and Ghismonda from Boccaccio's Decameron, a number of texts relating to the Abbey's abbots, monks, and its legendary founder Joseph of Arimathea, and much else besides.4

The damage later sustained by the manuscript mean its original collation is unclear. A. G. Rigg proposes that its seven quires "were probably unbound until modern times" the manuscript's purple-grey hard cover and white imitation-vellum spine were added in the late seventeenth or early eighteenth century, after the manuscript passed into the possession of antiquary Roger Gale (d. 1744).⁵ The front half of the manuscript's original soft vellum folder still survives, though, and suggests that the manuscript may have originally comprised a collection of ready-made paper quires that were gathered, but perhaps not securely bound, within this soft cover. As Da Rold has shown, from the early fourteenth century, English stationers were making blank quires and even whole blank books to order, a practice that became more widespread as the century went on, due in large part to the increasing use and availability of paper. These volumes were produced chiefly for administrative and recording purposes but as appears to be the case for the Glastonbury Miscellany, they could easily be turned to other uses.⁶

Rigg identifies seven hands in the manuscript. "T," likely a Glastonbury monk, was responsible for most of its original contents from fols. 1v to 86r, copying around eighty separate items. The evidence of numerous changes in ink and pens suggest the manuscript was added to gradually over several years. Around 1475, "X" added additional items in the blank spaces at the beginning and end of the manuscript. "D" then added titles to several poems early in the sixteenth century.⁷ With the Reformation and the dissolution of England's monasteries, Glastonbury Abbey was closed. In 1539, the Abbey was stripped of its valuables and its abbot Richard Whyting was executed. Masonry was removed from the abandoned buildings as they passed between a succession of private owners and by the first decade of the eighteenth century the site was described as a ruin.⁸ Yet even as the place of its production and the impetus for much of its original contents was dismantled, the Glastonbury Miscellany continued to invite further additions. One of approximately forty manuscripts to survive the breaking up of the Abbey's library, it appears to have been transported from Glastonbury to London. The Miscellany was still being added to in the early 1560s, initially in the small number of blank folios later in the manuscript and then in the spaces between and alongside its existing texts. The good quality, sized paper used in the manuscript-which Rigg suggests was imported from Italy or "more probably" the Netherlands-afforded later handwritten additions.⁹ Its leaves were not what early modern writers would refer to as "sinking paper:" poorly sized or unsized leaves in which ink spreads or runs, thereby discouraging further handwritten additions.¹⁰

Hand "A," who in Rigg's account was "clearly...very learned," was responsible for much of the material added to the manuscript after its removal from the Abbey, adding at least seventeen further items of varying lengths, including three lists of English kings and queens from William the Conqueror to Elizabeth, a note on the value of English currency, acrostic poems, and a short verse on the symbolism of colours.¹¹ The last datable entry by A refers to the events of the fourth of June 1561. In a short note squeezed into a space at the foot of fol.88r, A describes how St Paul's "was burn[t] with lytenynge which began at ... a clock in the after none att the toppe oof the Stepell and so burnyd downward all that night vntyll ... hole churche was bur..." (*Fig. 1*). The text above the note is a topical verse in two sections, also copied by A. The first verse is an attack on Sir Richard Gresham (d.

1549), a mercer and former sheriff, alderman, mayor of London, and Member of Parliament. The second verse, which seems to be incomplete, is a defensive reply by the author and schoolteacher Richard Sherry.¹² Transferred to London, the first port of call in the *Stores of the City*, the manuscript had clearly become part of a new network of reading and use. While the *Stores* offers what Jonathan Hsy describes as an "oblique overview of the city through disparate locations," the later texts copied by A zoom in on specific, datable events in the capital.¹³

Fig. 1 *A short note (headed "Powles") on a fire at St. Paul's, London, from June* 1561, *beneath two topical verses on former mayor of London Sir Richard Gresham. Trinity College, Cambridge, MS O.9.38, fol.88r*

Like so many other "medieval" books, the Miscellany poses the question of how to effectively conceptualise and describe its ongoing use. In an earlier version of my work on the manuscript, I wrote of how its empty leaves and spaces "invited" and perhaps even "compelled" further additions by its later users. In so doing, I described the time of the Glastonbury Miscellany as strikingly "polychronic," in the sense elucidated so compellingly by Jonathan Gil Harris. Harris's account draws on the work of Bruno Latour and Michel Serres, both of whom have explored how objects bear the imprint of many different times and, in so doing, can prompt multiple different understandings *of* time.¹⁴

Recent work on *affordances*—much of which also takes its theoretical coordinates from Latour's and Serres's work on time, technology, and mediation—provides one way to think further about the eventful lives of objects like the Glastonbury Miscellany, and to add some further nuance to descriptions of how its leaves "invited" or "compelled" further additions. Originating in James J. Gibson's work in ecological psychology, *affordance* has emerged as an important, if contested, analytic tool in science and technology studies, communication studies, and design studies.¹⁵ The recent refinement of *affordance* by scholars working in the field of communication studies dovetails with much book historical work, which engages, though from a different disciplinary grounding, with similar questions around the properties, functionality, and materiality of media artifacts, and their users' expectations of and attitudes toward technologies of mediation. Peter Nagy and Gina Neff's account of "imagined affordances" provides an especially valuable account of affordances not as static and deterministic, but rather as emergent combinations of material and perceptual factors—the properties and functionality of objects, but also the imaginative and emotional states of their designers and users.¹⁶

Building on Nagy and Neff's work, Jenny L. Davis and James B. Chouinard describe affordances as "the dynamic link between subjects and objects in sociotechnical systems."¹⁷ We might think of the Glastonbury Miscellany as *allowing* Hand A's further additions in the sense outlined by Davis and Chouinard in their theorization of the interrelated "mechanisms" of affordance. "Artifacts *allow*," they write, "by remaining indifferent to if and/or how a particular feature is used, and to what outcome."¹⁸ More

than that, we might more accurately say that the manuscript *encouraged* further inscription, to adopt another of the terms in their schema. "Artifacts encourage," Davis and Chouinard write, "when they foster, breed, and nourish some line[s] of action."¹⁹ For A, the Miscellany offered good quality paper on which to write, as well as the portability afforded by its loose binding and soft cover. As Alexandra Gillespie notes, such volumes "were lighter and easier to handle when reading" and "kept the bound codex open to the sort of dynamism that is a defining feature of the composite and/or multi-text manuscript."²⁰ In short, the broader codicological form of the volume, not just the blankness of some of its leaves, *encouraged* A to add yet more material to this already diverse collection of texts.

Importantly though, it was not just the manuscript's remaining blank leaves and spaces that *encouraged* further interaction. For not only did A add new texts in those leaves and other spaces, but they also methodically added to the texts copied by T. Hand A provided marginal comments in the form of proverbs and other notes, and titles where they were absent. On fols.2r-7r, for example, T copied the *Apocalypsis Goliæ*; A then supplied the title and added further material to the *explicit*. A also added titles to a work on the abuse of power in monastic houses on fols.9r-10r, to *Gregory's Garden* on fols.11v-12v, and to a medicinal recipe ("For the fluxe") on fol.16v, to take just three of several similar examples. On fol. 28v, A also made a small but significant textual emendation. In a Latin epitaph for Joseph of Arimathea, A crossed through T's original "sepultus" and added "excultus" above, so that the first line reads "Hic iacet sepultus <excultus> Joseph pater ille sepultus."

Moreover, while Hand A's identity and the precise circumstances of their additions are and will likely remain unclear, Davis and Chouinard's account of "*conditions* of affordance" — the variable material and social factors that underwrite how artifacts are used over time — provides a useful way to conceptualise and describe their varied interactions with the manuscript. Writing in sixteenth-century London, Hand A clearly *perceived* the leaves of the soft-bound manuscript as open to additional inscription and possessed the *dexterity* and *cultural legitimacy* to do so—that is, they possessed the ability to write, they could access texts to copy, and considered their additions worth preserving

alongside the manuscript's existing contents.²¹ Further, they *perceived* the texts copied by Hand T not as unfortunate or uninteresting remainders, but as texts that should be made more easily findable and navigable, and that should be corrected where they erred in particularly noticeable and significant ways.

The Glastonbury Miscellany's soft binding was an important element in the "imagined affordances" A brought to the volume. However, it also meant that the manuscript's paper quires were vulnerable to damage. Unfortunately, the Miscellany was badly water damaged in the second half of the sixteenth century, soon after the various additions and emendations made by A but before it became part of Sir Robert Cotton's library early in the seventeenth century. Further, at some point in its history, and beginning around fol. 65, the top corner and outer edges of its folios became badly frayed. In a steady diminution of its leaves, by the time we reach fol. 90, the folio has been reduced to a small crescent around six inches in length (*Fig. 2*). By the seventeenth century, the manuscript was no longer an object that encouraged further additions or emendations. Instead, its later readers sought to extract its textual content, while they still could. The antiquarian and Cotton librarian Richard James examined the manuscript around 1628 and made a transcription of some of its texts in what is now Bodleian Library, MS James 7. James then appears to have lent the manuscript to Brian Twyne in Oxford. In 1634, Twyne made his own copies of sections of the manuscript, now Bodleian Library MS Twyne 24.22

The manuscript's condition deteriorated further over the following decades. In 1729, the antiquarian Thomas Hearne, who had been lent the manuscript by its new owner, Roger Gale, described it as "very rotten."²³ Gale donated the manuscript to Trinity College, Cambridge in 1738, alongside numerous other early printed books and manuscripts. As he worked on it in the mid 1960s, Rigg noted that handling the manuscript was "very difficult, particularly at the points where it is most illegible."²⁴ Inside its restored front cover is what will likely be the final inscription made in the manuscript: a pencil note reads "Repaired 1969." The leaves added to the manuscript during its modern renovation ameliorate some of the damage and stabilise it in a useable form, for a time at least (though as Michelle R. Warren asks of the 250-year life span of

modern "archival quality paper" like that used in the Glastonbury Miscellany, "How long is long enough?").²⁵ Cutting across the conventional association of blankness with future inscription, the space of these leaves is not for any further writing. They do not *allow* or *encourage* more inscription and any attempt to do so would likely be perceived by the manuscript's current custodians as an acutely *il*legitimate cultural and scholarly act. Once a medieval blank book, a loosely bound volume that *encouraged* further additions and that remained dynamically open to the future, the Glastonbury Miscellany is now also, in significant part, a book of blanks.

comos homes Jemone Seterio: Augustine) Se mounderone Bandt Dietf abfenti voloz: fini mofine proton mobert a file The press of the parton approved foly hin for y toly name p for the bythy pape Not From (200 2 Abamo 24 bly fo bo to the never plall my fo ouser you Ano Soudon no de Conont to prodow multides to they West fay but , af. c.c.c. c. (yyb. vozys not for manue galyonatt

Fig. 2 The damaged final folio of the Glastonbury Miscellany, mounted on modern blank leaves. Trinity College, Cambridge, MS O.9.38, fol. 90

<u>"Back up soon"</u>

The repaired and rebound leaves of the Glastonbury Miscellany have been freely available online to view and study for some time. Yet the history of the *digital* manuscript is not one of uninterrupted access. The preceding discussion attended to the manuscript's origins and use; in this section, I want to trace a brief account of the Glastonbury Miscellany's online existence. While digital resources afford access to medieval books, they often do not do so entirely stably or, in some cases, even for that long. Further, we can extend our critical attention to the level of the interface, to how the architecture of scholarly resources allow and encourage, but also demand, certain kinds of interaction with and navigation through primary materials. The interface, as Johanna Drucker reminds us, "is not merely a portal for access to something that lies beyond or behind this display. Intellectual content and activities do not exist independent of these embodied representations."²⁶ Digital things therefore possess a "dubious ontology," in which, as Michelle R. Warren and Neil Weijer write, "their way of being is inseparable from our way of knowing them. Or, conversely, the way that we know them becomes what they are."²⁷ As I note above, I am therefore interested in how *affordances* provide a way to think across the book's history, from the codex itself to the interfaces and complex technical infrastructures through which users experience its remediated form.

The Glastonbury Miscellany was digitised as part of the University of Cambridge English Faculty's *Scriptorium* project. *Scriptorium* began in 2006 and was initially funded with a three-year Resource Enhancement Project grant from the AHRC. Its focus was "manuscript miscellanies and commonplace books from the period c. 1450-1720," a compiliational principal that usefully traverses the conventional medieval-early modern and script-print divides. The twenty manuscripts and commonplace books were selected from those held in ten "partner institutions:" college libraries in Cambridge (Emmanuel, King's, Queens, St John's, and Trinity), the Cambridge University Library, the Brotherton

Library at Leeds University, and the libraries of Holkham Hall, Belton House, and Lambeth Palace.²⁸ English is predominant but most of the selected manuscripts include texts in multiple languages. Thus, while the project originated and was originally housed in the University's English Faculty, the question of its precise relation to the idea of a national literary and cultural heritage remains a productively open one. After all, many of the multilingual books gathered there—the Glastonbury Miscellany included—implicitly work against the modern disciplinary partition of literary and codicological study along national lines.

Scriptorium provided free, unrestricted access to all its images; a not insignificant fact given that it began at a time when many institutional repositories were trialling subscription models. The Parker Library on the Web, for example, originally operated on this principle, though it has since moved to an open access model.²⁹ The original *Scriptorium* site presented its digitisations in a purpose-built interface. The manuscript viewer was accompanied by short essays on fourteen of the twenty volumes written by a range of scholars associated with the project and a link to *English Handwriting Online 1500-1700: an online course,* a resource designed primarily for students which includes a wide range of pedagogical materials and online exercises. At the end of its AHRC funding in 2009, *Scriptorium* received additional support from the University of Cambridge and the partner libraries, in order to maintain the resource's operability and to introduce higher resolution images. Thanks to the affluence of its "home" institution(s), *Scriptorium* therefore avoided the fate of some DH projects initiated during the early 2000s, which did not endure after the end of their initial AHRC grant period.³⁰

It was this updated version of *Scriptorium* that I relied on as I worked on the Glastonbury Miscellany in 2014 as part of my doctoral research. Then, in early 2018, as I began revising that work, I attempted to return to the digital Glastonbury Miscellany. On clicking the bookmark saved in my web browser, I was met with the following sight:

Fac	ulty of English	
Home	Prospective Students 🗸 Faculty Library People 🗸 Research Multimedia <mark>Resources 🗸</mark> Intranets 🗸 News Events	
Reso	ources	
Scri	otorium	

Scriptorium is website devoted to medieval and early modern manuscripts online. It is centred on a collection of digitised manuscripts of commonplace books and miscellanies dating from 1400-1720. As well as high-quality page images, it also offers descriptions, transcriptions, and other supporting resources.

The Scriptorium web site is offline while a review of content and security is undertaken. We do not have a set date for restoration of the affected resources, but we are making every effort to have them back up soon. In the meantime, we are going to give access to the manuscript images via Apollo, the University's data repository. Work has started on this at the time of writing (November 2016) and should be complete shortly.

Fig. 3 Screenshot of https://www.scriptorium.english.cam.ac.uk, March 29, 2018

One of my first thoughts on seeing the *Scriptorium* error screen was that the digitisation's disappearance resonated with the manuscript's own eventful medieval and postmedieval existence—in particular, its passage in and out of numerous institutions, the damage it sustained, and the lengthy period in the late seventeenth and early eighteenth century when it seems to disappear from the archival record entirely.³¹ More practical concerns soon took over, though, and as directed by the Scriptorium error screen, I followed the link to the homepage of Apollo, the University's "data repository." There, I was instructed to send an email to obtain digital images of the manuscript. A friendly exchange with an Apollo administrator followed and high-resolution Tiff. images of my requested folios were promptly provided. This, then, was a moment at which the smooth functioning of the "human-to-software" interface, which had afforded access to the digital manuscript at any time, was replaced by human-to-human interaction structured by the hours of the working day. Moreover, the decontextualized Tiff. images of the Glastonbury Miscellany served as a useful reminder that every digital image is an archival artifact in its own right. While *Scriptorium* had artfully folded each of these images into a coherent avatar for the physical book, their new existence as discrete files stored on my own hard drive pointed up both their own historicity as digital objects and their status as representations of the manuscript made at a specific point in time with particular equipment, under particular institutional conventions and conditions.³²

Scriptorium's lengthy period offline ended later in 2018 when the site was migrated to the new Cambridge Digital Library (CDL). There, the Glastonbury Miscellany became

part of an extensive collection of digitised materials spanning many centuries and a substantial technical infrastructure of digital reproduction and preservation.³³ In the CDL interface's default view, a single manuscript folio is displayed in the left half of the display. The manuscript metadata and a menu with various additional options occupies the right half. The menu and metadata can be disappeared by clicking a small square tab, a bookish icon that recalls the parchment or fabric tabs that were sewn into the fore-edges of some manuscript leaves as a finding aid. The metadata includes extensive descriptions of the manuscript's materials, condition, binding, script, foliation, layout, decoration, and provenance. In the case of the Glastonbury Miscellany, much of this material is drawn from Rigg's painstaking work on the manuscript in the second half of the twentieth century, with some additions from later scholarship.³⁴

In the CDL, this metadata is augmented with hyperlinked "Subject(s)," "Place of Origin," and "Associated Person(s)" displays for each manuscript, which provide useful ways to move between other manuscripts and printed books in its extensive collections. Clicking the "Similar items" tab in the drop-down "View more options" menu displays an array of related books from *Scriptorium* and the broader CDL collection. The floating portals refresh with each turn of the accompanying digital folio. These elements of the CDL interface all *encourage* users to access and make us of other digitised resources in the collection, to return to Davis and Chouinard's mechanisms of affordance.

In some instances, though, users can also catch a glimpse of how structured and mediated, rather than natural and inevitable, these links really are. Take, by way of example, one of my experiences with the "Similar items" display that accompanied fol. 90v of the Glastonbury Miscellany, the fragmented folio discussed briefly above. Of the ten portals to "Similar items" that the interface generated, nine directed me to Leeds, Brotherton Collection, MS Lt 91, another manuscript in *Scriptorium*. Of those nine portals, six directed me to fol.1r of the manuscript, two to fol.1v, and one to the image of the manuscript's front cover. The usefulness of this function seems to dissipate in the case of fol.90v, where I was directed to a very narrow range of "Similar items" indeed. Yet even here—an instance where the links that can be made are constrained by the fragmentary

nature of the primary source being represented — the interface still created a convincing *impression* of abundant connections to other materials, at least momentarily (*Fig. 4*).

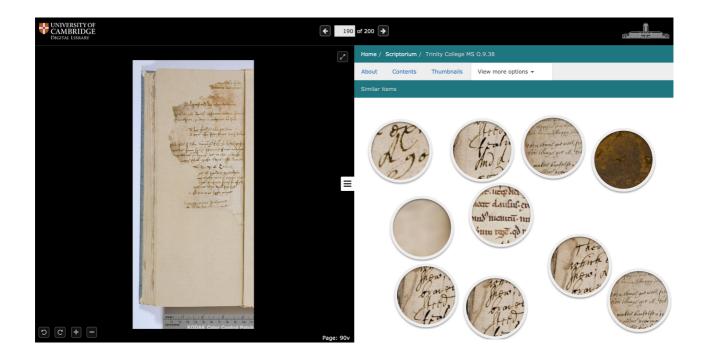


Fig. 4 Fol. 90v of the Glastonbury Miscellany and the 'Similar items' display, CDL viewer screenshot

More broadly, the "Similar items" tab intimates some of the ways scholarly resources are imbricated with larger technological developments, semiotic codes, and techno-cultural expectations. By linking ostensibly alike materials, the display of "Similar items" in the CDL logically and visually resembles various other online interfaces. It is the digitised manuscript equivalent of the "More like this" tabs on Netflix or the "Inspired by your purchases" display on Amazon. The CDL also has a "My Library" feature that offers users the chance to create a unique profile and then to bookmark pages and curate their own links between materials, much as we do on other online platforms. And like other platforms, the CDL offers this feature in exchange for certain personal information: the CDL *demands* that users of the service who are not members of the university sign-in via their Google, Facebook, or LinkedIn accounts, to return once more to Davis and Chouinard. To be clear, I do not intend these as flippant comparisons, nor do I mean to imply that there is necessarily anything cynical in the CDL's intentions. The free-to-use CDL clearly has different long- and short-term aims than those of huge platform corporations like Netflix and Amazon. Rather, my point is that just like other online platforms, it is in the CDL's interests to direct users to its other resources, to *encourage* users to make links between them, and simply to stay on the site for as long as possible. One way of retaining users is to provide us with individual profiles that enable us to record our interactions with the site and its materials. Another is to develop interfaces that make the links between similar materials not just apparent, but also easily and quickly navigable, such that those links even begin to appear somehow inevitable or natural, rather than highly structured and contingent.

At the same time, though, other elements of the CDL interface are indicative of important developments over the last decade in the display and use of digitised scholarly resources. The CDL encourages users to remain within its digital boundaries; yet it also encourages users to cross those boundaries and to turn their attention elsewhere. The "Use" box immediately beneath the manuscript description and shelf mark includes the International Image Interoperability Framework (IIIF) manifest for each image and a link to open it in Mirador, the open-source interface that enables users to compare and manipulate multiple high-resolution images from different online repositories. As is the case for an increasing number of online repositories, the CDL evinces what Benjamin Albritton describes as a "paradigm shift" that has yet to be "fully absorbed by the scholarly communities" that work with digitised manuscripts. The CDL encourages users to access and study its materials through its own interface and its various tools and links, a highly structured experience of the manuscript that still cleaves in significant ways to what Albritton describes as the "older notion that a manuscript website is analogous to a published catalogue, in the sense of being a resource one 'goes to' in order to reference a curated set of information about some set of objects."35 Yet at the same time, the CDL also "serve[s] up" interoperable images to be used in Mirador and to be integrated into pedagogical resources like Digipal that enable forms of comparative study that traverse institutions and repositories.³⁶

The history of the digital Glastonbury Miscellany comprises its original but now inaccessible form in the initial version of *Scriptorium*, its brief existence as a collection of images shorn of all metadata and a graphic user interface, and available only via email exchange, and its current existence in the CDL, where it has been enfolded into a larger technical infrastructure, as well as into the slowly unfolding digitised manuscript "paradigm shift" identified by Albritton.³⁷ This is a history both of gains and losses over time, and of changing affordances. The relative security and stability offered by the CDL and the IIIF-enabled portability of its images has come at the loss of much of the original functionality and pedagogical scaffolding of *Scriptorium*'s purpose-built site. The original content of the project is now dispersed across multiple websites and, potentially, multiple internet servers. The accompanying essays and a link to *English Handwriting Online* 1500-1700: an online course are still located on the English Faculty website, where the original *Scriptorium* homepage now functions as a placeholder for a primary resource stored elsewhere. Moving from one to the other is easy enough now but given the unbundling and rearrangement of its original constituent elements, as well as the age of *English* Handwriting Online 1500-1700 resource, it is distinctly possible that their fates will diverge in the not-too-distant future.

This essay argues that recent work on *affordances* provides a potentially valuable theoretical tool for thinking across the history of the "medieval" manuscript, from the codex itself and its changing social and cultural networks of use, to its afterlife as a digital object. Nagy and Neff's account of "imagined affordances" and Davis and Chouinard's schema of the mechanisms and conditions of affordance can enable a thicker description of the kinds of later addition to "medieval" books exemplified by A's interactions with the Glastonbury Miscellany. In one sense, the manuscript's paper leaves clearly provided a convenient place for A to write. While the long-standing notion that early modern England was a particularly "paper short" society has recently been challenged by Helen Smith and others, it would be surprising indeed if the Miscellany's good quality paper leaves had been left unfilled.³⁸ Yet at the same time, A's varied interactions with the softbound book clearly demand a more nuanced account of how both its material features and

existing textual content *encouraged* further additions of various kinds, even if their identity and the precise circumstances in which they were interacting with the book remains unclear. This is a task for which the language of affordances and their framing as a "dynamic link between subjects and objects in sociotechnical systems" seems well-suited.³⁹

One of my broader working contentions is that recent theories of affordance dovetail in potentially useful and interesting ways with attempts to nuance descriptions of the organising principles of late medieval books and, in particular, the idea of "miscellaneity." As a volume that joins different contexts and networks of reading and use, we should understand the manuscript's designation as a "miscellany" in the critically reflexive sense outlined by Arthur Bahr: "Miscellaneity is...most useful as a provocation to further investigation and new modes of reading, rather than as an objective designation."⁴⁰ Alternatively, we might more accurately, though somewhat more awkwardly, call the "Glastonbury Miscellany" the "Glastonbury-London Multi-text." To do so would be to foreground the temporal density of a book that remained dynamically open to future additions, and which was made and remade in multiple arenas of decentralised textual production.

My brief history of the *digital* Glastonbury Miscellany tracks how the manuscript's eventful life has been paralleled, to a certain degree, by that of its remediated form. As Michelle R. Warren writes, attending to the history of digitization projects in this manner "reveals the current arrangements to be *arrangements*—not natural, inevitable, or neutral, but the product of complex interactions of protocols, communities, machines, and capital."⁴¹ Like Warren, I am interested in how numerous scholarly practices are now dependent on complex, large-scale technical systems and, by extension, how they are increasingly entangled, and perhaps even entrapped, within private corporations' attempts to capitalise users' behavioural data and to enclose and monopolise digital space and its physical infrastructures. As I note above, the CDL includes the option to sign in to its "My Library" feature via a Google, Facebook, or LinkedIn (owned by Microsoft) account; this is a convenient option, to be sure, but that convenience also serves as a reminder of how pervasive those companies' online presence is. With that in mind, I want also to note that the CDL uses Google Analytics to track users' movements through the

site. It does so, we are told, in order "to understand how users are navigating our website, see how often content we publish is used and to test changes to improve the user experience." While "Your IP address is anonymised" and the Cambridge University "core site complies with "Do not track" requests and will not load Google Analytics' cookies if you have this setting enabled in your browser," the default setting for the website is that it will gather every click and scroll we make while we are there.⁴² As Aarthi Vadde and Jessica Pressman write in their introduction to a recent collection of essays on "Web 2.0 and Literary Criticism," "Participation and conscription converge in online life as 'opting in' has become the default setting."⁴³ In turn, this data contributes to Google's monopolisation and monetisation of information about how users behave online—it is Google that ultimately owns the data that users generate, which it then aggregates and sells on.

The CDL therefore provides a timely example of how scholarly resources and activities are embedded within what Christian Ulrik Andersen and Søren Bro Pold call the "metainterface industry," their way of describing the "contemporary interface paradigm" in which computing is increasingly ubiquitous and nearly all online activities are tracked, collated, and aggregated via "large-scale, globally networked infrastructures."⁴⁴ It bears reiterating that our scholarly work in the humanities does not take place apart from this latest stage in the evolution of capitalism, which Andersen and Pold call "semio-capitalism" and Shoshana Zuboff describes even more ominously as "surveillance capitalism."⁴⁵ Rather, our use of resources like the CDL becomes just one more type of "productive inscription of behavioural data" — we too, in this account, have become a kind of primary source awaiting reading and interpretation.⁴⁶

While my interest in digital materialism—in images, interfaces, and infrastructures, and in all the forms of labour and exploitation that underpin them—preceded the COVID-19 pandemic, these matters have assumed new significance in its wake. When physical artifacts were rendered inaccessible, digitised manuscripts and other scholarly resources became additionally important; many library staff, including those at the institution where I was employed, risked their health, or were pressured by their managers to risk their health, to go into work to scan materials for academics and students. At the same time,

academia was rapidly becoming additionally reliant on platform corporations and forprofit "ed-tech" companies. With academia's "move online," various forms of datacapture and surveillance were further embedded in the everyday operations of public institutions.⁴⁷ Relatedly, for many institutions the pandemic has provided the pretext for the mass redundancies of academic and professional staff, often on the basis of spurious teaching and research metrics.⁴⁸ For the already precarious labourers who make up the majority of the academic workforce, a future of "hyper-casualisation" seems likely. Medieval manuscript studies was already in the midst of important and potentially farreaching developments in the provision and use of online resources. Chief among them is the "paradigm shift" identified by Albritton which, from an optimistic perspective, can be seen as at least a partial realisation of the digital realm's democratising potential. Medievalists have also long been engaged in attempts to think through "the practical and theoretical implications of the digitization of medieval texts," and the literacies demanded by medieval objects in their various forms.⁴⁹ Yet in what Kyla Wazana Tompkins calls the "ongoing present" of the pandemic and the related events of 2020, questions of digital access, labour, and disciplinarity have assumed new, and newly challenging, dimensions, for scholars of all periods.⁵⁰

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¹ Da Rold, *Paper*, 173. As Da Rold notes, "vertical quarto" describes the manuscript's format, while "holster book" presumes a certain kind of use. More broadly, the vertical quarto format exemplifies how "the medieval bookmaker, well before the advent of print, had imagined and experimented with variable sizes of paper to maximize paper usability" (177).

² Ibid., 48.

³ Harris, "Aspects," 1.

4 For a full description of the manuscript's contents, see Rigg, *A Glastonbury Miscellany*. In Rigg's account, the manuscript rivals any surviving fifteenth or sixteenth century commonplace book "in the catholicity of its contents, which are drawn from the literature of three centuries" and which include "English and Latin, prose and verse, clerical and popular, satirical and devout, practical and entertaining, medieval and humanistic" (26-7). 5 Ibid., 1. Rigg's descriptive index, published in 1968, notes that the vellum spine "is now falling apart" (1). The spine was repaired and the cover replaced when the manuscript was rebound the following year.

6 Da Rold, Paper, 167-68.

7 Rigg, A Glastonbury Miscellany, 5-8.

8 Carley, Glastonbury Abbey, 143-44.

9 Rigg, A Glastonbury Miscellany, 3.

10 On "sinking paper" and the complex metaphorical associations that developed around it in the early modern period, see Calhoun, *The Nature of the Page*, 116-21.

11 Rigg, A Glastonbury Miscellany, 6. From the limited evidence available in the

manuscript, Rigg suggests A may have been called "Sowdene" or "John Pydsloy."

12 See Rigg, "Two Poems," 389-91.

13 Hsy, "City," 315.

14 Harris, Untimely Matter, 3-4.

15 See Davis and Chouinard, "Theorizing Affordance," 241-2; Nagy and Neff, "Imagined Affordance," 1-3; and, in further detail, Davis, *How Artifacts Afford*. For recent work on the medieval textual and cultural archive that engages with theories of affordance, see Bernau, "Figuring with knots;" and Da Rold, *Paper*, 4-6.

16 Nagy and Neff, "Imagined Affordance."

17 Davis and Chouinard, "Theorizing Affordance," 241.

18 Ibid., 244.

19 Ibid., 242.

20 Gillespie, "Are *The Canterbury Tales* a Book?" 75. On "multi-text" and "composite" as alternative descriptions for manuscripts usually described by scholars of Middle English

as "anthologies" and "miscellanies," see ibid., 68-9; and Friedrich and Schwarke,

"Introduction," 3-11.

21 Davis and Chouinard, "Theorizing Affordance," 245-6.

22 See Rigg, A Glastonbury Miscellany, 7-9.

23 Ibid., 2.

24 Ibid.

25 Warren, "Philology in Ruins," 73.

26 Drucker, "Humanities Approaches to Interface Theory," 9.

27 Warren and Weijer, "Re-Imagining," 115.

28 See "Scriptorium."

29 For a good account of this transition, see Warren, "Making a home."

30 On the fate of one such AHRC-funded project, the "Imagining History" resource based at Queen's University, Belfast, see Warren and Meijer, "Re-Imagining," 112-3. The initial, AHRC-supported timeframe of *Scriptorium* (2006-9) coincided with a turbulent period for digital humanities projects in the UK. As Bella Millett details, in June 2007 the AHRC withdrew funding for the Arts and Humanities Data Service (AHDS), "which had been offering central advice and data preservation facilities to computing projects in the United Kingdom since 1996" (48). The AHRC argued that "long term storage of digital materials is best dealt with by an active partnership with [Higher Education Institutions] rather than through a centralised service," but also stated that the AHDS was becoming too expensive in any case. As Millett also notes, the AHRC's decision preceded broader cuts to higher education funding in the UK in the wake of the 2008 financial crisis, cuts that were accelerated and deepened by the austerity politics of the coalition government elected in 2010 (52-3).

31 How the Glastonbury Miscellany came to be in the collection of Trinity College, Cambridge is a story marked by significant gaps and absences. How it ended up in Sir Robert Cotton's library in the seventeenth century is not known. After Richard James and Brian Twyne made their transcriptions in the 1620s and 30s respectively, it then disappears from the archival record, only reappearing a century later in the collection of

antiquary Roger Gale (1672-1744), who added the current binding before donating it to Trinity College in 1738. See Rigg, *A Glastonbury Miscellany*, 8-9.

32 I use "avatar" in the sense outlined by Dot Porter in "Is This Your Book?". On the practicalities of manuscript imaging and digitisation, see Smith, "What it is to be a digitization specialist."

33 For more information on the origins and aims of the CDL, see "Introducing the Cambridge Digital Library."

34 The metadata for the Glastonbury Miscellany is relatively recent, but as Sîan Echard has discussed, "the new technological interface" of the digital manuscript viewer "often sits over much older data" from the nineteenth and even eighteenth centuries, data which continue to exert significant effects on how users read and study medieval books

("Containing the Book," 104-5). See also Albritton and Treharne, "Introduction," 10-11.

35 Albritton and Treharne, "Introduction," 12.

36 Smith, "What it is to be a digitization specialist," 23.

37 On the recent transition away from bespoke, purpose-built interfaces that proved expensive and difficult to maintain, toward "a more generalized digital library framework," see Albritton and Treharne, "Introduction," 11.

38 See Smith, '"'A unique instance of art'". "Far from being paper-short," Smith contends, "early modern England was a society in which diverse kinds of paper circulated, and were used for a wealth of purposes."

39 Davis and Chouinard, "Theorizing Affordance," 241.

40 Bahr, "Miscellaneity," 182.

41 Warren, "Making a home," 226.

42 "About this site."

43 Vadde and Pressman, "Web 2.0"

44 Andersen and Pold, *The Metainterface*, 10. While corporations present this "as a new reality of smooth access and smart interaction," Andersen and Pold continue, "its protocols also hold within them reconfigurations of everyday production, distribution, and consumption of culture" (11).

45 Ibid., 12. Zuboff, *The Age of Surveillance Capitalism*. See also Dorothy Kim's introduction to *Alternative Historiographies of the Digital Humanities* and the essays therein.

46 Andersen and Pold, *The Metainterface*, 12. See also Bildhauer, "Putting the Net Back Into the Internet," 107.

47 On the rise of online proctoring software and its role in a "pedagogy of punishment" driven by for-profit ed-tech companies, see Swauger, "Our Bodies Encoded." 48 On the unbundling and piecemeal privatisation of the university's functions and the termination of academic staff on the basis of spurious teaching and research metrics, see Hall, *The Uberfication of the University*. For a recent example of these practices and of organising efforts against them, see UCU University of Liverpool, "Flawed selection criteria for redundancies."

49 Singer, "Stranger/Medieval Things," 1.

50 Tompkins, "The Shush," 417.