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The Passing of Print: Digitizing Ephemera and the Ephemerality of the Digital

In 2005 I went to the Bodleian Library in Oxford to carry out some research for the *Nineteenth-Century Serials Edition (ncse)* <www.ncse.ac.uk>. This edition, launched in beta form in 2008, republished six nineteenth-century periodicals and newspapers: the *Monthly Repository* (1806-1838); *Northern Star* (1837-1852); *Leader* (1850-1860); *English Woman's Journal* (1858-1864); *Tomahawk* (1867-1870); and the *Publishers' Circular* (1880-1890). The majority of this material was provided by one of the partners in the project, the British Library, but was supplemented from holdings of other institutions where necessary. The Bodleian run of the *Monthly Repository* was not only complete, but also contained a range of supplementary material that must have been excised from the run at the British Library. Assorted pamphlets, letters, music, portraits, minutes, petitions and various engravings had been bound in to the volumes alongside the issues themselves. On a number of these supplements, the words 'to be retained' had been scribbled in pencil in a nineteenth-century hand. Someone had decided that this material, although supplementary, was not to be ephemeral and so it was instead incorporated into the more recognizably book-like bound volumes on the library shelf that, to us, constitute the *Monthly Repository*. This mark, in pencil not ink, was itself intended to be ephemeral, yet it, too, was preserved alongside the supplements, its

survival an accidental consequence of the more deliberate decision to regard the supplements as part of the journal proper. I vividly recall the feeling, probably familiar to most researchers who have spent time in the archives, of connection with a moment that had passed. For a second, stood in a lit corridor in the otherwise deserted, dark stacks, I was linked to that decision, long ago, to mark in pencil the printed object in my hands.

This paper is about this feeling of connection and what it means. The print objects that we regard as ephemeral are not supposed to survive: they belong among the unremembered throng of things that we make use of, but necessarily forget. It is this connection with the countless transient artefacts of everyday life that makes ephemera so valuable for historical research. We are so dependent on the material objects that structure our world that we rarely stop to consider them, let alone preserve and memorialize them. After all, we cannot keep everything (where would we put it?) and so we select certain types of object that we consider important or representative. These objects are what we choose to remember: they enable us to tell certain stories about who we think we are and construct a future that corresponds to who we want to be. Ephemera, when it survives, allows us to glimpse the material that we have chosen to forget. It exposes the cultural practice of memory, marking the space between history as memorialized and the past as lived. However, it is only a glimpse. Ephemera, whether it survives by chance or design, can provide historical insights but cannot restore the full complexity of the past. Instead, it stands as a metonym for what we have forgotten.

It is for this reason that I describe the encounter with printed ephemera as uncanny. Out of time, ephemeral objects haunt us with their presence and remind us of what we have discarded. There is a well-documented history of haunted media, in which the machines with which we produce language are found to develop unexpected voices of their own.¹ The uncanny effects of printed ephemera also result from having our voices returned to us in unfamiliar ways. Despite the modern fantasy of disembodied informational flows, we have always depended upon the material facets of objects to bridge the gaps between us, both to store up information and to enable it to circulate through culture. Whereas we recognize the value in those objects that encode information for use and reuse (archives, collections, even that eminently indexical form, the codex), there is a diverse category of objects that are designed to yield their informational content in the moment and then be discarded. Our failure to recognize the integral role that such ephemeral material plays in enabling the information economy is a result of our orientation towards the archive, yet it is a mistake to align important information with that encoded within objects that endure. When we encounter printed ephemera, whether it survives by chance or design, we have a rare opportunity to engage with a component of the information economy that should have been lost. To play its part, ephemera should pass with the moment and so when it survives, it does so despite itself. Such encounters are always uncanny because ephemera belongs to the dead.

My argument rests on the key role that printed ephemera has played in enabling social life for the last two hundred years, whether by communicating information or participating in the countless interactions that characterize our quotidian existence.

Newspapers represent an interesting class of objects in this respect. Linked to the passing moment through their periodicity and their commodification of the news, they are ephemeral print forms yet their value as objects to be swapped, collected, cut-up and redistributed has long been recognized. The newspaper is therefore on the margins of the archive, teetering between recognized object of record and repository of exhausted trivia. To understand this liminal position, we need to understand the place of ephemera in print culture more broadly. In what follows I consider print as a technology of inscription and dissemination, allowing information to be in the world and move through culture. The industrialization of print enabled the proliferation of printed ephemera, underscoring the connection between multiplication and disposability. This was also the period where many of our institutions of memory were established, from national archives to local museums and galleries. More recently, digital technologies have introduced a different mode of inscription, changing the way that ephemera is instantiated in culture. The digitization of printed ephemera thus situates this material within a new informational economy, with its own conditions of memory and forgetting. What follows is in three parts. The first considers the cultural role of ephemera more broadly, arguing that its uncanny returns remind us of the mass of things we necessarily discard. The second focuses on the nineteenth century, exploring the relationship between print, inscription and cultural memory. The third and final part brings this analysis into the present, by examining the function of born-digital ephemera, and what digital environments might mean for the ephemeral printed objects that we want to preserve.

Throughout, I consider print as a technology of inscription that permits the dissemination of language. As inscription and dissemination determine how information is stored and shared, print enables memory to function beyond the individual. Like all print, printed ephemera permits text, in the broadest sense, to be in the world, but it does so only for a moment. This material is intended to pass away, but bears its inscriptions nonetheless. The volume of the *Monthly Repository* that I held in my hands that afternoon in the Bodleian was marked by three acts of inscription. There was the act of printing itself, bringing together a complex configuration of interested actors as well as paper and the press. Neither the affordances of paper nor the signs encoded upon it were sufficient to guarantee its persistence over time; instead, the ephemerality of the supplement was determined by an archivist or librarian, the trace of which was recorded in the pencil mark on the page. This, in turn, allowed the supplement to pass into the archive, where it was duly marked by the Bodleian's library stamp. These inscriptions moved the print object between informational economies, from what was to be forgotten to what was selected to be saved, ensuring its passage to the present. The final act of inscription was the transformation of the bound volume into digital form. Here, we partially repeat the actions of the unknown Victorian archivist at the Bodleian, signalling that this is content for the archive and so to be remembered. However, the digital constitutes a different regime of inscription and circulation and so entails its own conditions of memory and forgetting. The vast storage capacity and many interconnections of the network means that objects can be easily lost amongst abundance. The shifting technologies that structure the formal environment for digital objects means that the lost can become obsolete and difficult to recover. This is not to argue that the digital is somehow more

ephemeral than print, but rather that we are more attuned to the work required to preserve digital artefacts than we are those in print. We can preserve anything we choose: the value of ephemera, whether print or digital, is that it reminds us of what we correspondingly forget.

Haunted by the ephemeral

The title of this paper does not refer to the often overstated view that print is redundant in a digital world; rather, it refers to the necessary obsolescence of cultural life. We have always lived our lives intertwined with countless objects, some of which stay with us some time whereas others we let pass away. It is because ephemera belongs among the innumerable hoard of things we forget that it has a peculiar ability to evoke what has been lost. We are all familiar with the distinct affectual shock that accompanies the rediscovery of something we had forgotten: this is not just nostalgia, an opportunity to recollect and reframe a moment from the past, but also a peculiar reminder of the constructedness of memory. These once-forgotten objects stand for the complexity of the quotidian and their persistence belies the selective acts of memory through which we narrate our relation to the past. It is this proximity to the transitory moment that allows all ephemeral objects, whether those once known to us or not, to possess an affectual charge and its origin, in the discovery of something that has returned from the forgotten, that has persisted over time when it should have passed away, means that this class of objects can be described as uncanny.

Freud's well-known formulation of the uncanny, 'das Unheimlich', exploits the differing meanings of 'heimlich' as both the familiar and the concealed. Freud suggests that what is 'unheimlich', strange or unfamiliar, should also be 'heimlich' but instead remains disclosed (or more accurately, not undisclosed) (124-34). For Freud, uncanny effects result when something that has been repressed returns to view. To live our lives we must forget the everyday, choosing to remember some things at the expense of others. Although it might seem as if forgetting is accidental, there is always agency at work as the remembered takes precedence over the forgotten. For Freud, not all returns of the familiar are necessarily uncanny and he reserves the category for those things, like infantile impulses, that are repressed because they are no longer appropriate. The uncanniness of the return of ephemera is not related to the fact that it was once known, but rather that it has persisted despite itself. All man-made objects are the products of design and so have intended use encoded into their material properties. Ephemeral objects, for instance, are unlikely to be robust, unless such robustness is the result of another desired property. However, intended use only draws upon a delimited set of an object's wider affordances and it is often these latent properties that enable it to survive. These are the properties that permit a flimsy pamphlet to survive on the shelf between two books or a photograph to keep its vivid hues because it was buried at the bottom of a cabinet. The virtuality of an object's properties – they only become realized when put to use – allows them to perform in contradictory ways and so anchor different narratives simultaneously. The ticket stub, for instance, might evoke a memory, but it remains a ticket, marked by its role in a particular moment of social life. Designed to perform a

specific function before passing away, the return of ephemera disrupts the passage of time by partially standing for all those other objects that have been forgotten.

We forget ephemera all the time, but there are some ephemeral objects we choose to keep. We preserve what we value and these values vary at the individual, institutional and social levels. What we save become relics, objects transformed from multifaceted agents within culture to stand, instead, as its ideal representatives. As a society, we tend to select our relics from monumental works that are marked by socially-mandated systems of value (whether commercial, artistic or simply scarcity) and ephemera of all kinds can find its way into our institutionalized repositories of social memory (libraries, archives, museums etc) through these mechanisms. For instance, the papers of noted figures often contain material that would otherwise be ephemeral; posters and brochures associated with significant events are often deemed worth memorializing; and the recent decision by the Library of Congress to archive an impression of *Twitter* demonstrates a social valorization of the contribution of ephemera to a culture that thinks itself an exceptional 'information age' (Young 20-6; Cohen). Privately, however, we select from a broader repertoire of objects and associate them with a different set of values. As Susan Stewart argues, the souvenir stands for the lost materiality of an unrepeatable moment that has passed (135). As ephemera is characterized by its delimited cultural life, it is often associated with particular events, whether public or private (Young 17). The ticket stub, perhaps related to a significant meeting, might be kept somewhere safe so it can persist when memory, at some level at least, does not.

The objects that survive from the past into the present, whether kept by individuals or institutions, are preserved for reasons other than their function in enabling everyday life. Both private and public relics serve as the material basis for the production of narratives about the past. Stewart argues that the souvenir ‘generates a narrative which reaches only “behind”, spiralling in a continually inward movement rather than outward toward the future’ (135). Yet the private acts of memorialization enabled by the souvenir seem to function in the same way as the more public museum display. Adam Phillips suggests that museums express our anxiety about remembering correctly. ‘Remembering done properly’, the rhetoric of the museum suggests, ‘will give us the lives that we want’ (unpaginated). As Stewart argues, the souvenir is a metonym for broader events, standing insufficiently for the full complexity of the moment (136). Its partiality is ‘the very source of its power’ as its impoverishment enables ‘a narrative discourse which articulates the play of desire’ (136). Ephemera, while participating in such practices, plays a double role: while representing what has been remembered, it belongs among the many other objects that have necessarily been forgotten. Even though these objects survive through deliberate acts of remembering, personal or institutional, this doubleness ensures they retain part of their uncanny effect. The relics we keep for our own purposes – fetishized so that we might tell tales of who we are as individuals, institutions, and societies – evoke all those others that we depend upon to live in the moment, but necessarily discard as we move on.

The quotidian is a resource from which we select what we think is important, but its abundant complexity ensures that the remainder is repressed. These acts of repression

occur at all levels, sublimated into a kind of unconscious memory against which the individual, institution or society as a whole defines itself. In historiographical terms, we repress the everyday in order to construct our grand, overarching narratives. In each case, the clutter of the everyday must be removed from sight in order to see clearly. The survival of any object has the potential to uncannily evoke this absent context but ephemera, because of its explicit association with the transient everyday, carries the most potent affectual charge.

Printed abundance

What we know as the print archive is a fragment of what was printed; equally, we only read those parts of the archive with which we are most familiar, further delimiting what we think of as the past. The industrialization of print in the nineteenth century altered the conditions of the information economy by changing the terms on which information could be inscribed and then circulated through culture. As Andrew Stauffer notes, printed paper was integral to this new way of storing up and moving information:

The Victorian era was a great age of paper as technological developments transformed the industry and multiplied its productivity many times over, enabling the rise to ubiquity of bureaucratic paperwork, advertising posters and bills, paper money, stocks and shares, and home products like wallpaper and papier maché ornaments, not to mention newspapers, periodicals, books, and printed ephemera of all kinds. (Stauffer 3)

The affordances of paper and the increased capacity of the printing presses produced different ways for information, encoded in words and images, to exist in the world.² There was still an important place for monumental works in Victorian culture – one only has to consider the cemeteries, statuary, buildings, public works and other institutions that were left as legacies, as well as the various collected and library editions of important printed works – but print culture offered a complementary form of persistence based upon circulation. As opposed to the necessarily scarce form of the monument, produced from a minimum number of inscriptive acts (often just one) upon a form designed to endure, printing on paper enabled many acts of inscription upon a material that was increasingly affordable, portable and flexible enough to be used in a number of ways (as a flier, a poster, a pamphlet, a newspaper) while nevertheless offering a stable and rationalizable writing space (Sellen and Harper 16-18; Kirschenbaum 80-1). Rather than endure through the persistence of monuments, the logic of print is to endure through multiplication and dissemination. The rigidity (but flexibility) of the press, able to endure impression after impression, coupled with a material that readily bore its marks and enabled them to be distributed far and wide, allowed public presence through duplication, display and, crucially, circulation. This was presence based on the duplication and dissemination of signs and its perceived insubstantiality meant it was open to charges of inflation and worthlessness, a con that equated movement with value.

As Stauffer, amongst others, has noted, the juxtaposition of these two economies is at the heart of Dickens's *Our Mutual Friend*.³ In this novel everything is commodified and put into circulation – corpses, limbs, people, debt – while, at the 'symbolic centre', the dust

mounds stand as an emblem for the inheritance of capital (Ginsburg, 179). The value of the mounds depends on their accumulation: this is the circulatory transformed into something monumental and tangible, able to establish character and bequeath wealth into the future. The two economies were closely connected: just as insubstantial and portable issues of a weekly periodical or newspaper could be bound up into substantial and well-ordered volumes, so too could the circulation of paper money allow one to build a statue or bequeath a park, or convert the transience of notoriety into the marks of genius. The vast sums made by well-known manufacturers of proprietary medicines such as Thomas Holloway (Holloway's pills) or J. Collis Browne and J.T. Davenport (Chlorodyne) enabled them, like Veneering in *Our Mutual Friend*, to become respectable members of the middle class, accruing fortunes from the circulation of drugs whose efficacy was widely attributed to the prominence of the advertisements that filled the pages of newspapers and periodicals and adorned the flat spaces of the urban environment.

While new books remained expensive, printed paper in other forms was unavoidable in the nineteenth century. As Stauffer notes, 'paper was newly visible everywhere, and its very ubiquity threatened its signifying power' (6). Paper was stable enough to bear its marks for a time and had many uses other uses (for further inscriptive acts, wrapping, fuel, or as toilet paper) but was not, in itself, valuable. Print could, of course, become so due to the texts that it encoded and, as always, such values had a public and private dimension. But paper itself was considered disposable, either left to rot on the walls or swiftly covered by something else. The ephemerality of paper, at least in the nonbook forms of print, underpinned the suspect value of the representational sign systems that it

permitted to circulate. Its very materiality seemed to reiterate the suspicion that circulation was an end in itself by making clear the worthlessness of its content once it had ceased to move. ‘Not only were Victorian writers confronted with countless examples of paper decaying to waste in the streets,’ writes Stauffer, ‘but they also recognized that the many unread and illegible pages of daily life in London were like dust or sand, haunted by meaning and yet effectively blank’ (6). Haunting associates meaning with a moment that has passed, but implies that it somehow returns, differently, into the present. The proliferation of printed paper promised revelation to whoever was skilled enough to compile and decipher the fragments. The nineteenth-century witnessed the emergence of institutions, commercial (the various railway companies; insurance; news agencies) and political (the General Register Office; Inland Revenue), that were designed to gather documents and produce information, enabling privileged acts of reading.⁴ Yet it was in fiction that such readers reached their apotheosis, as the plots of sensation novels, detective fiction and ghost stories dramatized, in exciting fashion, the hermeneutic struggle to establish the latent meaning of documents whose true significance had been occluded by the logic of circulation.

For Friedrich Kittler, a discourse network describes the ‘technologies and institutions that allow a given culture to select, store and process relevant data’ (369). Printed ephemera of all kinds – pamphlets, posters, handbills, tickets, proforma, memoranda – played a constitutive role in the nineteenth-century discourse network; however, their ephemerality made it unlikely that such material would survive. For the historian, the value of all types of ephemera lies in the properties that once made it valueless. The

connection of ephemera to the prosaic, transitory and mundane is both the reason that it should not have survived and the reason that it is so valuable for us today. Of the different forms of printed ephemera, newspapers are a key resource for restoring the clutter of the everyday. A print genre defined by miscellaneity and seriality, the newspaper aggregates disparate textual components and associates them with a moment that passes. All newspapers, because they are serials, are designed to pass from the present into the past. The current number is only current until it is displaced by its successor; it then becomes one of a number of back issues, all deemed out of date because of the existence of the new current number. However, it is a mistake to align the newspaper completely with the ephemeral. In his famous article, 'Government by Journalism', W.T. Stead, writing from Holloway Gaol in the aftermath of the Maiden Tribute scandal, claimed the newspaper was 'a page from the book of the life of the town in which it appears, a valuable transcript of yesterday's words, thoughts and deeds' (655). According to Stead, the newspaper is worth keeping precisely because it is ephemeral. As a page from the 'book of life', Stead implies that work must be done to the form of the newspaper to make it worthy of taking its place on the shelf. Binding and shelving newspapers enforces linearity, informational stability, and physical robustness. In the transformation from individual issue, intended to be distributed quickly before it becomes out of date, to the stable, indexical reference resource offered by the codex, valuable information can be lost that links the publication to its mode and moment of production. Material such as multiple editions, advertising wrappers or inserts are often considered supplementary to the publication proper, and so removed. Even the logic of the archive, which represents serials as a sequence of volumes, all with the same title, masks the

actual rhythm of publication and the relationship between components. Made of paper and miscellaneous in form, the newspaper functions in both regimes of inscription: it serves to disseminate ephemeral matter, both by dispersing individual printed issues and serving as a resource for other publications elsewhere; but it can also memorialize such material, allowing it to enter the archive. The accession of newspapers is a deliberate act of remembering; it also entails an act of inscription, transforming the form of the newspaper at the same time as it redefines its cultural function.

Many genres of serial were complicit in this redescription. Nearly all periodicals, for instance, offered the means for their transformation from ephemeral commodity to worthy reference work, often so that publishers could exploit the opportunity to sell readers boards, covers, back numbers and volumes. The *Monthly Repository* is interesting in this respect as its role in the informational economy shifted with its place in the market over the course of its run. Established in 1806 by the Unitarian minister Robert Aspland, the *Monthly Repository* eschewed the format of the review, instead embracing the dialogic form of the miscellany. As Isobel Armstrong argues, this format was central to the ethos of the publication, its editor fostering the appearance of cordial exchange, placing contributors and readers on an equal footing in order that opinion be exposed to democratic, rational, scrutiny (unpaginated). Aspland edited the *Repository* for twenty years, until he was bought out by the newly-formed British and Foreign Unitarian Association in 1826. One of Aspland's aims for the *Monthly Repository* was to serve as a medium for Unitarian communications, helping to consolidate the denomination. Not only was Unitarian business reported in its columns, but reports of meetings,

controversies, and the proceedings of the Unitarian Association were frequently published as supplements. The purchase of the *Monthly Repository* by the Association was an attempt to further align the publication with Unitarianism, hopefully placing the publication on a more secure financial footing (Mineka, 167-8). However, within five years its new editor, the Unitarian minister William Johnson Fox, had bought the *Repository* outright and began to divest it of its Unitarian content. Immediately after Aspland's departure the *Monthly Repository* abandoned its double columns for the single column format of the review and changed its name accordingly from *Monthly Repository of Theology and General Literature* to *Monthly Repository and Review of Theology and General Literature*, with only 'Monthly Repository and Review' appearing on the masthead.⁵ This shift in genre, from ephemeral miscellany to more synoptic review, lost readers and, once Fox bought out the Association in the autumn of 1831, he severed the publication's formal connection with Unitarianism entirely. In February 1832 he began to publish Unitarian intelligence as a separate publication called the *Unitarian Chronicle* and priced threepence, considerably less than the shilling sixpence charged for the *Monthly Repository* (anonymous [W.J. Fox], 'Correspondence' 144). According to Fox, the *Monthly Repository* had always had two purposes, 'to advocate the principles, and to record the proceedings of Unitarian Christians'; the *Unitarian Chronicle* allowed him to separate out the two, identifying two distinct audiences amongst his readers. Although initial numbers of the *Chronicle* were set so that they could be bound up as part of *Repository* (it was to be a 'Companion to the *Monthly Repository*, uniform in its size, form, type and paper'), Fox's interests – personal, theological, political and literary – lay with the *Repository* and he sold the *Chronicle* in April 1833, ending the *Repository's*

connection with the everyday business of Unitarianism (Anonymous [W.J.Fox], 'Address', 1; Mineka 169-203).

The *Monthly Repository* published supplements over its entire run. Under Aspland, these ranged from content left over from the issues, either because of lack of room or because they arrived after the issue had been set, to commemorative material, usually engravings of eminent figures or significant buildings. The situating of Unitarian business amongst this content presented readers with a bibliographic challenge. Those supplements consisting of extra material were explicitly intended to be bound up with the issues proper, as were the engravings, but the material published on behalf of the Unitarian Association had a more ambiguous relation to the journal. Unlike the extra material or engravings, these supplements did not signal their supplementarity through textual features such as instructions to binders, running heads, or continuous pagination. Aspland clearly believed readers wanted this material month to month, but did not present it in such a way that it could easily become part of the *Monthly Repository* as memorialized in volume form. The pencil marks on the supplements that survive in the Bodleian run of the *Monthly Repository* represent one institution's response to this challenge. They are inscriptions, but they stand in place of a more radical act, that of transforming the issues of the *Monthly Repository* as received by the library (however this might have occurred), into the neat volumes currently in the stacks. The presence of the supplements, warranted by the words 'to be retained', allows us to glimpse the *Monthly Repository* as it was marketed and consumed, but only partially. The pencil marks have ensured the survival of some of the supplements, but they also summon the

spectres of those presumably with a different mark, or no mark at all, that have been destroyed. We can never know what they were, but the marks attest, nevertheless, to the fact they once existed.

Move to trash

The sense of uncanniness that accompanies ephemera serves a vital methodological purpose. It reminds us of the limits of what it is possible to know about the past and draws attention to the manner in which we put its enduring remains to use. Digitization makes print subject to a different technology of inscription. If nineteenth and early twentieth-century culture produced myths of a malevolent (because paradoxically persistent) ephemera, then our digital age has its corresponding discourse about inscription and memory. On the one hand, there are periodic concerns about the persistence and privacy of information uploaded onto social networking sites such as *Facebook*; on the other, laments that the digital age will leave no record of its existence.⁶ Such contradictory attitudes to digital culture correspond to the difference between our encounters with digital objects as displayed entities onscreen and their existence as encoded data on storage devices. The environment within which we interact with digital objects makes them appear malleable, reproducible, portable and troublingly insubstantial. Yet this environment rests upon robust technologies of storage and retrieval that can track and archive digital objects as they proliferate. In his important book *Mechanisms*, Matthew G. Kirschenbaum distinguishes between ‘forensic’ and ‘formal’ materiality. The former describes the material traces that are inscribed onto and

read from the disk; the latter, the processed symbols that constitute what we usually consider the digital environment (10-11). The distinction is important as it supplements the behaviour of digital objects onscreen with the technologies of inscription that underpin them. As Kirschenbaum makes clear, computers are technologies explicitly engineered to enable a digital environment ‘supported and sustained by its capacity to propagate the illusion (or call it a working model) of *immaterial* behaviour: identification without ambiguity, transmission without loss, repetition without originality’ (11). It is this combination of forensic and formal materiality that simultaneously permits digital ephemera to both flourish and linger.

Computers need memory, somewhere to read from and write to, in order to carry out the most basic tasks. All actions are logged and, as distribution depends upon duplication, data is routinely copied and stored as it moves through the network. These processes are largely opaque to users, seduced by the functionality of electronic environments. Not only does this make it difficult to locate and recover data, but the data itself is remarkably persistent. As many users know, when we delete from our local disks, we really only mark the space as empty and, as Kirschenbaum has shown, even when overwritten, data can be recoverable given the requisite resources (25-71). The falling cost of storage means that we keep more by neglecting to delete and the multiplication of physical locations in which data can be stored – memory sticks, local hard disks, network drives, cameras, phones, tablets and other portable devices – means that remembering is increasingly distributed. Electronic environments foster the proliferation of ephemera, whether these are files deliberately created by users (documents, messages, blogs, tweets,

photographs etc) or by the systems that they are using (logs, caches, temporary files etc). The apparent mutability of the web, seemingly suited to the transience of ephemera, is complemented by local caches and web crawlers, both of which allow content that might be hosted for only a limited time to proliferate and persist elsewhere. The rise of cloud computing has outsourced memory, placing both what we mean to keep and what we forget to erase in private hands. Although the business models that underpin many of these companies meter storage, in the case of Google it is given away free in exchange for information about users. This model also underpins the rise of *Facebook*, by far the largest social network with 750 million users at the time of writing. As Facebook monetizes information about users (and, crucially, what they do when logged in) it has an interest, like Google, in acquiring as much information as possible. The various privacy settings of the site enable users to control who sees what, creating different representations of an individual from the same account. Although users can control (to a well-publicized limited extent) what persists in certain relationships and what is forgotten (or simply doesn't appear) in others, everything is known to and remembered by the site itself. From the perspective of the companies that own the digital spaces where we increasingly spend our time, there is no such thing as ephemera, just data.

The technologies of inscription that structure the apparent fluidity of the digital world impose their own conditions of remembering and forgetting, and their own possibilities of uncanny returns. It is these same conditions that determine the properties of printed ephemera when we incorporate them within digital resources. Digitization allows us to remember print ephemera by resituating it alongside other privileged objects in the digital

archive. As long as it is well-encoded, ephemera can become much more accessible, returning the everyday to its place amongst the memorialized. Nineteenth-century printed ephemera, for instance, has been digitized within dedicated resources such as *19th Century British Pamphlets Online* <<http://www.britishpamphlets.org.uk/>> (also available through *JSTOR* <<http://www.jstor.org/>>) or ProQuest's *John Johnson Collection: An Archive of Printed Ephemera*. It has also been included within more disparate archives such as *Google Books* <<http://books.google.com/>> or the *Internet Archive* <<http://www.archive.org/>>, usually as part of inclusive digitization strategies. Digital objects based upon print ephemera have also been uploaded by users onto numerous blogs and social networks. The extent to which such material can return depends upon how it has been digitized. The specialist resources reflect more seriously on the relationship between the objects as represented in the context of the resource and those on the library shelf and so encode a richer range of information. More attention is devoted to metadata, both in order to make objects findable and to describe their significant features. In the larger archives such as *Google Books*, the definition of information tends to be limited to crude (because machine-generated and unchecked) transcripts and some cursory metadata. In such large resources, it can be easy for ephemera to become lost amongst abundance, but it remains locatable and so is capable of return. The same is true of digital objects elsewhere on the web. The extent to which these are recoverable depends on how they have been digitized and marked up, and whether they are in a particular environment that organizes content so it is searchable or can be browsed. The success of *Flickr* <<http://www.flickr.com/>> in making visual material searchable through

crowd-sourced tagging has provided one such environment for the return of ephemera, while popularizing a model for visual material widely imitated elsewhere.

The existence of digital representations of printed ephemera testifies to a deliberate decision to remember this material, even if only indirectly as part of a wider collection. These digital objects are more like the bound volumes of a periodical, transformed through acquisition, than the ticket that passes accidentally into the library slipped between the leaves of a book. Like bound volumes, digital representations of printed ephemera are transformed through acquisition; however, unlike printed material, which might enter the archive with simply a stamp or handwritten attribution, the entire materiality of these digital objects, as simulations, is dictated by the terms of the archive, whatever this might be. This is not to say that their value is reducible to the fidelity of the reproduction or that they have no existence beyond the context of the resource (they can be exported, repurposed, reused, and such acts can enable different properties to emerge), but that their materiality is the direct result of the way in which they have been digitized and the environment in which they perform. Nevertheless, in reproducing aspects of print ephemera, these digital objects also reproduce their uncanny effects. The reliance on a combination of page facsimiles and textual transcripts, with the former privileged for reading and the latter for searching, has ensured the reproduction of aspects of the print object's form, rather than just its textual content. These are often specific to the particular example of the digitized print object in the archive, thus reproducing the marks that individuate that object and encode the history of its use.

As with printed ephemera, the processes of acquisition can temper the ability to recall the transient everyday by imposing the institutional forms of memory but, as argued above, such processes produce their own uncanny effects and, for digital objects derived from printed ephemera, these can be more pronounced. The sheer presence of the objects stands for those that have not been digitized, that increasingly shadowy collection of objects that Patrick Leary memorably called the 'offline penumbra' (Leary 82-3). The ghostly fingers that can be seen within *Google Books* are the equivalent of the pencil marks on the supplements of the *Monthly Repository*, signalling the processes of inscription and transformation that mark the passage into the (digital) archive.⁷ All ephemera is spectral because it evokes the virtuality of other potential uses: for digital objects derived from print ephemera, their intentional materiality signals both these other uses and the alternative, unrealized, ways in which the object might have been represented. The inadequacy of digital representation thus points to its rich potentiality: these digital objects are only one possible interpretation of the nondigital objects on which they are based and they can be used in many ways. The risk is such potential gets forgotten in the routinized use of a few select digital environments that normalize certain properties and increasingly stand for the richness of the digital as a whole.

There is a danger that in digitizing this material we forget it once more. It is often remarked that there is no such thing as benign neglect in the digital world.⁸ While it is certainly true that preservation is connected to use, it is not quite the case that neglect will result in the passing of a digital object. Digital objects will survive as long as there is the necessary configuration of hardware and software to process them. Given the persistence

and multiplication of digital storage, there is a good chance that a digital object that is permitted to circulate through the network will be inscribed within something that will endure. The persistence of digital objects within neglected storage media are no different from those forgotten pieces of print ephemera, lying unexamined within boxes or hidden between volumes on the shelf. As Kirschenbaum writes, stored data is associated ‘with the uncanny, the unconscious, the dead’ as it resides in a ‘a kind of suspended animation, a coma or waking death, oddly inert yet irreducibly physically present’ (97). To prevent those digital objects that we want to preserve from becoming digital ephemera, we must choose to remember them. Not only does this entail well-coded digital objects with appropriate documentation, but also some sort of institution within which they can be actively curated. Our existing institutions of memory can serve this purpose, and the development of institutional repositories and other digital accession strategies testifies to the increasing acceptance of this role. The conditions within which digital objects can be preserved might be different to print but they can be curated nonetheless. But such institutions have their origins in the nineteenth-century impulse to memorialize the products of the presses. The computer is a different inscription device that participates in a complementary discourse network. There are other, digital, institutions to which we must be attuned, whether scholarly resources that aggregate content or more popular networks where users share content. By embedding digital objects within networks of use, we can create communities who can undertake their own curation. Both types of institution are required and, ideally, interconnected. Without putting these resources in place, we risk being doubly haunted by our digital versions of print ephemera: not only

are they representative of other forgotten print objects, but their uncanny digital returns also reminds us of other lost digital artefacts.

Conclusion

The *Monthly Repository* is actually quite well represented in the digital world. Not only has it been published *Nineteenth-Century Serials Edition* (ncse) <<http://www.ncse.ac.uk>>, but it also appears in ProQuest's *British Periodicals, 1700-1900* and there are at least two runs within *Google Books*. As mentioned above, the run within *ncse* was sourced from the British Library and lacks many of the supplements found in the Bodleian run. ProQuest are rather coy about the provenance of their titles and only state that their edition was produced from the UMI microfilm collection *English Literary Periodicals*. However, the page images are rather more eloquent, bearing library stamps that testify to their origin within a printed object on the shelves of the University Library in Cambridge. The two runs within *Google Books* are from Princeton and the Bodleian. Figure one shows how the page with the pencil marks looks within *Google Books*. Although the supplement survives into the digital edition, the pencil mark is once more ephemeral and so lost, bleached out due to the conditions in which the issue was filmed.

The persistence of digital ephemera on various storage media means that there will be a rich range of material for study in the future. Some ephemeral objects will survive because we choose to keep them, lodging them within our institutions or keeping them

safe on our hard disks; some will survive unintentionally, tucked away on discarded drives, reproduced on unknown sites, or abandoned on forgotten servers. What will survive will only be a fragment of what we produce, putting into play the spooky dynamic of repressed history and haunting returns with which we are familiar from print. When we digitize print ephemera, we rarely intend for it to be ephemeral in the digital world, but instead to take its place amongst those digital objects that we choose to remember. Not only must we entrust it to the network, but it must also be curated so that it can endure despite the changing technical environment. Just as the museum resists the ephemerality of the everyday, so too must the spaces we create for those parts of digital culture we wish to conserve. These are political issues: we must choose to remember this material, placing it within institutions that can endure beyond the transient moment. Only once print ephemera takes its place amongst our acknowledged cultural inheritance can we understand the role that it plays in structuring social life. However, when we choose to curate ephemera, locating it within our institutions of memory, we exorcise its ghosts.

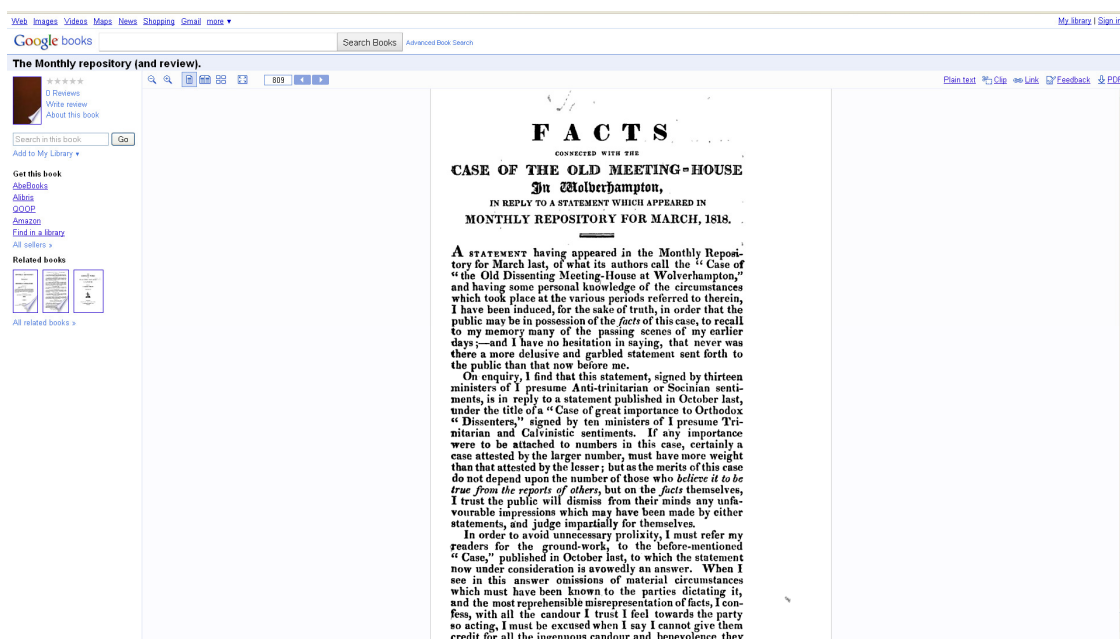


Figure One. 'Facts Connected with the Case of the Old Meeting House in Wolverhampton.' *Monthly Repository* 13 (1818): 1. Screenshot from *Google Books* <<http://www.books.google.com/>>.

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³ See, for instance, Michal Peled Ginsburg, 'The Case Against Plot in Bleak House and Our Mutual Friend', *English Literary History*, 59 (1992): 175-195 and Daniel P. Scoggin, 'A Speculative Resurrection: Death, Money, and the Vampiric Economy of Our Mutual Friend', *Victorian Literature and Culture*, 30 (2002): 99-125.

⁴ There is a growing body of work examining the development of the nineteenth-century information economy. See, for instance, Edward Higgs, *The Information State in England: The Central Collection of Information on Citizens since 1500* (Basingstoke: Palgrave Macmillan, 2004); Daniel R. Headrick, *When Information Came of Age: Technologies of Knowledge in the Age of Reason and Revolution, 1700-1850* (Oxford: Oxford University Press, 2000) and Toni Weller, *The Victorians and Information: A Social and Cultural History* (Saabrücken: VDM Verlag, 2009). A good summary of the field is Toni Weller, 'An

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⁵ For the full account of the *Monthly Repository*'s shifts of title, see James Mussell and Suzanne Paylor, 'Editions and Archives: Textual Editing and the Nineteenth-Century Serials Edition (ncse)', in *Text Editing, Print and the Digital World*, edited by Marilyn Deegan and Kathryn Sutherland (Farnham: Ashgate, 2009), pp. 140-142.

⁶ See for instance Mike Melanson, 'Study: Youth Not Only Care About Facebook Privacy, They Do Something About It.' *Read Write Web* (30 July 2010)

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