Rewriting history: the information age and the knowable past

Does history any longer have meaning in the information age? Baudrillard has described history as 'our lost referential, that is to say our myth'[1]. History seems to slip away in the precession of simulacra accompanying mass media and digital computing: ever-present if inauthentic versions of the past overwhelm any sense of historical continuity. Arguably we live in an era of timeless time, or time without chronology in which the very patterns of our daily lives are disrupted[2]. Some theorists suggest we have reached the end of history[3]; others that real historical research is no longer either possible or desirable[4]. In the ephemeral spaces of the information society history apparently lacks purchase. As an emerging discipline, information history must take seriously the proposition that information itself possesses historical agency. It must develop ways of understanding the past that address both 'information as a central theme' and its 'impact upon existing historical theses'[5]. This chapter argues that structural transformations in the production and consumption of information accompanying the transition to the information society require us to rethink both the nature of history and our relationship with the past. They do so because of the tendency of mass media and digital computing to undermine the ontological stability that writing was assumed to possess in the modern age. A subtle complicity exists between writing and history. In unpicking that complicity we might uncover new kinds of previously marginalized historicity.

Over the past twenty years a lingering crisis has slowly played itself out in the discourse of scholarly history. Driven by epistemological scepticism[6], postmodernist historiography has emerged to challenge many of the received assumption of historical research, drawing attention to history's highly literary nature. In many ways history can be situated as a predominantly literary activity: a process of rewriting the written records of the past. Hayden White for example described history as 'a verbal structure in the form of a narrative prose discourse'[7] with an 'ineluctably poetic nature'[8]. Ankersmit suggests 'that historical knowledge is as much "made" (by the historian's language) as it is "found" (in the archives)'[9]. Munslow that 'history is best understood as what it plainly is – a narrative about the past'[10]. But while this literary nature of historical research is widely acknowledged[11], postmodernist scepticism goes further, questioning whether history can ever transcend its status as a literary activity to reveal the truths of past experience. It should already be clear that I have some sympathy with these perspectives. However, I do not find them adequate. The problem of history in the information age is not predominantly epistemological; it is also ontological. It concerns not only the literary nature of historical accounts, but also the ontological stability of the historical trace itself, which shares with those accounts a dependency on the medium of writing. Structural changes to the production and consumption of information have destabilised the historical trace, undermining a key tenet of scholarly history: the idea of a knowable past.

The postmodernist history theorist Keith Jenkins has noted that the *past* and *history* are different things adding that they 'float free of each other; they are ages and miles apart'[12]. The phenomenal reality of past experiences is only rarely seriously doubted[13], but the possibility of adequately re-presenting those experiences in historical works remains more problematic. Jenkins highlights the gulf between the truths of history and the truths of the past, questioning whether they are ever really commensurable. Most historians believe they are. Fulbrook notes that 'most historians make at least an implicit claim for some degree of truth value for what they are saying'[14]. The incomplete nature of the surviving record, the further filtering, selection and arrangement that is subsequently made, and the re-presentation of those traces in predominantly narrative forms mean that historical interpretations always retain a degree of contingency. The truths of the past belong to the past. Nevertheless through disinterested critical distance historical accounts can approach objectivity, validating their claims against the events and experiences they seek to both contain and understand. The historian aspires to understand the past in Ranke's terms 'as it really was' whilst acknowledging the ultimate impossibility of that aspiration. In this way history can become more than a purely literary or fictive activity. Alun Munslow explains:

> Modernist or 'proper' history bases its claims to legitimacy as a discipline by discovering the meaning of a past reality: a meaning that is enduring and can be described or represented faithfully by the suitably distanced historian.[15]

History is therefore generally situated as a broadly empirical pursuit grounded in the surviving traces of the past by which the past is rendered knowable. Fulbrook notes 'there is extraordinarily widespread agreement that sources are the bedrock of historical research'[16]; Eaglestone argues this 'is perhaps the central convention of the genre of history, and differentiates it most clearly from fiction'[17]. The surviving traces legitimize scholarly history, both testifying to past experience and validating particular historical interpretations.

It is in this assumption that the truths of past experience are revealed by the surviving record, not merely in the in the process of transforming those records into historical narratives, that the challenge to history in the information age is located. I want to frame that idea by another passing comment by Keith Jenkins, who draws here on the cultural critic and theorist Tony Bennett. This is therefore an uncompromisingly unconventional view of the historical process, and that it precisely its value:

> What is at issue in historiography – and indeed what can only ever be at issue – is what can be derived and constructed from the *historicised* record or archive. It is the 'historicised' nature of the records/archives that historians access that must be stressed here. For such records and archives are, as Bennett explains, only too clearly highly volatile and mutable products of complex historical processes in that, apart from the considerable amount of organised labour (librarians, archivists, archaeologists, curators) which goes into their production (preservation, cataloguing, indexing, 'weeding out'), the composition and potential of such traces/records vary considerably in terms of their potential use over time[18].

Jenkins does not explore the consequences of this further, but from arguments presented elsewhere, it is reasonable to assume he might understand the historicized record to function primarily in ideological terms, valorising certain perspectives and marginalising others[19]. There can be no doubt that what comes to be constituted in the historical record significantly influences the kinds of histories that can be made. Furthermore information professionals in their various guises contribute to this process as Jenkins implies. Elsewhere I have noted that decisions made in collection management are explicitly ideologically situated, even though the information professions tend not to frame their work in ideological terms[20]. Changes to what come to be constituted as the record in the library and archive also change the kinds of histories that can be written. This already historicised nature of the trace problemetises scholarly history's assumption that the past is rendered knowable by what is revealed in the historical record. It implies that historical narratives are already written into the record by those very historical processes to which it also testifies. Information history perhaps has an important role to play in critiquing how information as a product of particular social and cultural contexts, mediated by particular institutions such as the archive or library, and embedded within particular historically situated social processes comes to influence the ways in which we frame our understanding of the past. By telling the story of the record, its production, consumption and retention, it might uncover new kinds of historical experience.

This idea becomes critical to the problem of history in the information age because of explicit changes to the nature and status of record-making; it is the inadequacy of the digital record that causes history to lose its purchase. Throughout the period of high modernity the making of records was generally driven by what Weber described as administrative rationality, implying deliberate and purposeful actions[21]. In information rich societies by contrast records are often produced as a by-produce of our use of digital technologies. Almost everything we do leaves a trace inscribed in the digital sphere. But although information is proliferating exponentially[22], and in the process both inscribing a more complete picture of our lives than ever before and making possible new kinds of historical research[23], much of it remains highly ephemeral. The average lifespan of a website for example is less than seventy-five days[24]. This intrinsic ephemerality is exacerbated by the volatile nature of digital media; Conway has noted that 'our capacity to record information has increased exponentially over time while the longevity of the media used to store the information has reduced equivalently'[25]. Digital content lacks *persistence;* the material record often survives unless it is deliberately destroyed; the digital record is usually lost unless it is deliberately preserved. Consequently,

while the information age 'will undoubtedly have recorded more data than any other period in history, it will also almost certainly have lost more information"[26].

The volatile nature of the digital record has led to ongoing concerns about the preservation of digital culture. Some theorists fear the emergence of a new dark age, in which not records survive to testify to present experience[27]. Others fear digital technologies make history itself impossible, rendering the pasts of the future unknowable. Vincent suggests that 'a study based on the written word cannot survive the marginalization of paper'[28]. He argues that that 'we may be on the verge of a new prehistory' adding that:

> Electronic communication means no history. The fashion for open access means no history. The mass production of evidence, and its mass destruction on an industrial scale, means no history[29].

Historical scholarship is faced with a looming crisis of relevancy and legitimacy, driven in part by the changing status of the record within the situated habits and traditions of the information age. But if the volatile nature of the digital record suggests from one perspective the emergence of a new dark age or the end of history, from another it suggests only that there is something wrong with way in which scholarly history has embedded the idea of a knowable past in its persistent written traces. If we want to maintain that history still has meaning, we therefore need to explore what that meaning can be in an age when the historical trace is itself subject to such comprehensive destabilisation. Information history must address not only the story of the record, but also how that story might transform what history can mean in the information age.

In part this must entail a re-examination of the influence of historically situated modes of communication on the ways in which we interpret the traces of the past. Because the idea of the already historicised record presents a more challenging set of problems than those Jenkins suggests. While on the one hand the written record is always already worked-over in the ways he describes, on the other writing itself also involves historically situated traditions, values and beliefs. Mayhew has noted of the record that 'both the message it embodies and the medium through which that embodiment occurs are themselves historically contingent'[30]. And following McLuhan we now know well enough that both medium and message must make a contribution to the agency writing may have[31]. But the idea of *medium* should not be reduced to the mere carriers that McLuhan implied; it is the entire set of social practices and values that accompany the uses of writing, perhaps what Williams nebulously termed 'structures of feeling'[32]. It follows that as uses of writing change, from for example analogue to digital, or manuscript to print, the ways in which we understand the experiences it inscribes may also change. Printing helped underpin Enlightenment rationalism and the idea of a knowable past by stabilising writing in the printed text. Digital technologies are progressively undermining those ideas by destabilising writing once again. To understand the challenges to historical scholarship posed by the information age we therefore need to explore how the notion of a knowable past emerged under particular technological conditions in the production and reproduction of writing; we need to see ways of historicising the past as themselves products of particular historically situated traditions, values and beliefs.

The pursuit of a knowable past made accessible through interrogation of the meanings inscribed in the surviving historical traces reflects a dominant mode in current historical research, but it is not the only possible way of historicising the past. One of the earliest English uses of the word *history* with something like its modern connotations occurs in Gower's *Confessio Amantis,* written in an age on the very cusp of print. Gower's idea of *histoire* neither implied historical veracity nor any attempt to objectively document past experiences. History was a framework for hanging moral truths 'essampled of these olde wyse' for the benefit of 'oure tyme among ous hiere'[33]. It was intrinsically present-centred. Within a century Caxton used *history* to suggest the continuous methodical record of events and circumstances[34]. What Tosh terms *historical consciousness*[35] arguably germinated in late manuscript culture and began to take root in the transition to print. We might therefore imagine from what has been suggested above that print reproduction rapidly changed the ways in which we relate to the past. But the histories written in the subsequent centuries were not empirical accounts; historical works continued to be ecumenical about evidence, lacking

later scholarship's rigorous classification of source materials[36], and frequently placing scripture, literature, myth and tradition on an equal footing in ways that reflected 'the Enlightenment's pre-historical notion of historical change'[37]. Marwick has suggested that even by the Eighteenth century, 'in their contempt for basic scholarship and research […] historians showed an unjustifiable carelessness'[38]. History 'continued to be marked by a combination of moral engagement and literary endeavour'[39] that exposed its characteristic present-centeredness.

It took a more radical break to separate historical writing from the highly literary contexts in which it was traditionally embedded. Between Caxton and Collingwood mass publishing emerged to unsettle the cosy hegemony of literary culture. This reflected changing socio-cultural contexts following in the wake of the industrial revolution rather than any significant shift in the technology of the press. The 1709 Statute of Anne and 1886 Berne Convention enabled the more effective economic exploitation of written works. Abolition of the 'taxes on knowledge' between 1853 and 1861, including advertisement duty, stamp duty on newspaper, and paper duty, further helped emancipate the printed word[40]. Educational reforms throughout the nineteenth century greatly increased literacy and created a new reading public[41]. The Improving transport infrastructure facilitated the distribution of books and journals. Contemporary commentators noted the change to reading habits throughout this period, one observing that 'people are used to reading nowadays in places where twenty years since a book was hardly available' and another that 'a passion for reading becomes commoner from day to day and spreads among all classes'[42]. The emergence of mass publishing was widely regarded with mistrust; many feared it would drown literary culture under the 'smother of new books'[43]. The inevitable tension erupted in a sustained epistemological crisis of sometimes veiled and sometimes vitriolic antagonism, epitomized for example by Arnold, Leavis and Eliot[44].

It was amid these wider social changes during the nineteenth century that history became uniquely associated with the idea of an empirically knowable past[45]. This transition reflected not merely an increased sophistication in historical methods borrowed in part from philology and the emerging social sciences[46], but also a conscious effort to break with the long tradition of broadly historical writing. The first act of scholarly history was to differentiate the new empirically grounded pursuit of an objective past from the literary histories that came before; history was established as a discipline 'independent from philosophy or literature'[47]. It explicitly proclaimed itself a science; 'professional' history replaced 'amateur' history as the foundation of our relationship with the past[48]. In fact, history could never fully secure these claims; its status as an empirical pursuit remained in question throughout the late nineteenth and twentieth centuries. But the doubt was itself sufficient to impress that it could be more than merely a literary activity. In this context it is as well to pose a question put by Foucault:

> We should be […] asking ourselves about the aspiration to power that is inherent in the claim to being a science. The question or questions that have to be asked are 'what kinds of knowledge are you trying to disqualify when you say that you are a science?'[49]

Tosh has argued that 'near-universal literacy raises the stakes' of historical writings by enabling 'the mainstream establishment interpretations' to 'penetrate everywhere'[50]. Scholarly history retreated before the rising tide of literacy into a positivist mode that attempted perhaps not to understand the past as such, but only to secure control over historical writing against a burgeoning literary culture. If the kinds of histories that had previously regulated the past were confounded by the expansion of the presses, the impulse became to re-regulate the past in new less accessible ways. Not any kind of history would now do, only those rooted in difficult to access historical archives and records. The man of letters, a 'whose synoptic vision […] is able to survey the whole cultural and intellectual landscape of his age'[51] was superseded by the scholarly historian; that synoptic vision replaced by an increasingly compartmentalized historical knowledge. History was 'professionalized' in the same moment that literary culture was regulated in scholarly criticism[52], although the impulse to protect 'minority culture'[53] drove the two once closely associated disciplines in different directions: towards realism and idealism respectively. Munslow has suggested that the rise scholarly publishing 'braced the nineteenth century disciplining of the past'[54]. History re-emerged in forms of new writing that in their regulation of the past sought to both conceal their literary nature and eradicate the influence of the present.

The new empirical history was able to rescue the past from its more mythapoeic field and render it empirically knowable in part by exploiting the ontological stability with which printing seemed to allow writing to be regarded. It therefore became complicit in the values of print culture: both relying on them and amid the explosion of knowledge in the nineteenth century also extending them. Burrow has argued that printing 'made less immediate difference than might be supposed'[55]; the real 'printing revolution'[56] was not located in the technology of the press, but in the conventions governing the creation and consumption of writing that technology made possible. These conventions developed gradually as print culture strengthened its grip, culminating in the late eighteenth and early nineteenth centuries at the very moment that scholarly history was developing its empirical stance. Printing offered the promise of an ontologically stable form of writing that would offer up its meanings more easily[57]; the exegesis of medieval interpretation declined as standardized grammar, morphology and syntax each helped secure the correspondence of world and word[58]. The development of descriptive bibliographic frameworks reinforced the idea of textual unity in the material artefact, and directed interpretation towards authorial intention[59]. Text became less a site of the cultural production of meanings, and more a vessel for memorialising individualized original expression. The constant iteration of memorial truths that characterize what Burrow termed 'intermittent culture' was replaced by the gradual accretion of knowledge in a 'continuous culture'[60]. It has even been argued that printing underpinned the Enlightenment[61], although it is probably more accurate to say that printing enabled Enlightenment rationalism to make certain assumptions about the ontological status of writing which in turn helped secure its progressive epistemological ideals. The printed text became a stable vessel for knowledge, separating the *known* from the *knower* in the processes of its production, transmission, and aggregation[62]. Scholarly history drew itself up on the scaffolding of essentially metaphysical notions about the ontological status of writing and its epistemological function that largely reflected the conventions of print reproduction.

The ontological stable text helped imply the putative objectivity of historical accounts. Munslow has argued that the separation of knower and known is central to modernist historiography[63]. Scholarly history depended on the notion that the truths of the past exist independently of the historical work. By isolating the text from the contingencies of tradition, memory, and oral culture printing impressed the idea that historical accounts could be more than merely the highly situated subjective narratives they so clearly were. It impressed that they could reveal the true meanings of the past, rather than merely appropriating the past and imposing their own meanings. In abstracting the individual written work from the wider textual field and imbuing it with an authenticity associated with authorial intention inscribed in an original creative act, printing also abstracted the historical account from the mythapoeic field in which past and present are fused by clearly contemporary values. The finalized printed work also implied a final objective history on which individual accounts could converge. The imposition of authorial authority over the written work was also an imposition of the historian on the real past. The historical work was not open to interpretation because it was already an *interpretation;* any negotiation about the truths that it claimed was deferred to the sources. Scholarly history therefore assumed for itself a sphere outside of the historical process from which it could project its interpretations onto a phenomenal past; a sphere in Barthes terms 'occupying a part of the space of books'[64].

It is in the tendency of digital technologies to undermine the apparent stability of writing, destabilising the assumption that the past is rendered knowable through its surviving traces, that the crisis of history in the information age is situated. The whole social context in which writing is produced and consumed has changed in ways that inevitably influence how we frame the idea of a knowable past. Susan Blackmore has distinguished between two modes of cultural reproduction: copying the instructions and copying the end-product[65]. The age of print generally relied on copying a material product; an original exemplar becomes the basis of all subsequent copies. As a consequence form and meaning become united in the materiel artifact; writing became in Buckland's terms a *thing*[66]. Digital texts are conversely algorithmically produced at the point of consumption; their reproduction occurs by copying the instructions for recreating them during the cycle of transmission and use. Digital technologies have therefore effected the virtual eradication of the material basis of the written work. Digital writing is not indelibly inscribed in its medium, but is recreated with every use. From this

apparently minor change in the mode of reproduction the very different qualities of digital textuality flow.

If mass media introduced a 'secondary orality' associated with radio, television and cinema[67], we are perhaps witnessing a secondary literacy associated with digital computing[68]. Writing is now thoroughly integrated into our social lives: we put it to greater and more varied use than ever before. With its use in asynchronous communications such as email, instant messaging, discussion groups, and social networking services, digital writing has adopted some of the characteristics of speech. New grapholects, such as txtspeak and leetspeak, have emerged to supplement standardized written forms. The emphatic mood has been extended with the use of acronyms and emoticons to expand writing's emotional range in imitation of speech. These *ostensibly* new uses of writing undermine conventions particularly associated with print reproduction. Spelling, capitalization, grammar and punctuation are all perhaps used more playfully[69]. Writing has also become the site of performance with specific kinds of language play emerging in virtual environments, such as identity play[70]. Digital writing has become a kind of hybrid of spoken and written forms; it is both a medium of communication and of record, carrying meaning in new ways[71].

The decentralized contexts of its creation and dissemination make much digital writing resistant to the kinds of fixed final form associated with print. Writing itself and written works have become more mutable and more malleable. This is exemplified by the wiki, in which the textual work is constantly evolving to meet the shifting expectations and needs of its users. Digital texts are often subject to this kind of constant drift. In digital contexts writing is often highly participatory and derivative; many digital texts do not emerge in single original creative acts, but in mash-ups, collaborations, and adaptations epitomised by slash fiction. Digital texts are consequently more explicitly situated as participants in an intertextual space. Their meanings are often generated in the relationship forged between works, both by allusion, and by the fabric of hypertext itself. Something like this is explicit in the epistemology of the Web; Berners-Lee has noted:

> I liked the idea that a piece of information is really defined only by what it's related to and how it is related. There is really little else to meaning. The structure is everything[72].

As a consequence digital texts find new meanings in the dialogues they create within their ephemeral contexts, not only through the explicit contextualisation implied by hypertext itself, but also from *ad hoc* contextualisation that emerges through search engine results sets, social bookmarking services and the like. The fabric of digital textuality is geared towards what Henry Jenkins has termed *participatory culture*[73], implying a pluralizing of textual authority that goes against the 'stabilising, individualising, internalising effects' of printing[74].

Changes of this kind fundamentally alter the way in which we approach the idea of an already historicized record situated within the persistent traces of digital culture. Emerging into the contested sphere of mass publishing history could hardly help reflecting in its attitude to sources assumptions about the status of writing that had underpinned Enlightenment rationalism. Those assumptions enabled source-writing to become subject of critical empirical investigation; to become in Eaglestone's terms 'reliable' and 'testable'[75] (or rather *reliable* precisely because it becomes *testable* against qualities impressed on the textual work). Elton suggested that 'criticizing the evidence means two things: establishing its genuineness, and assessing its proper significance'[76]. The ways this is achieved remain remarkably consistent across different schools of scholarly history. They include: establishing the type of source, how and why it came into being, what person or group created it, what attitudes, prejudices or vested interest it reflects, who it was written by or addressed to, whether the author, date and place of writing are what they purport to be, whether it can be traced back to the office or person who is supposed to have produced it, whether it is in the form expected, whether the age of paper, parchment and ink are what they should be, and so on[77]. These tests reveal a number of essentially metaphysical assumptions about the nature of source-writing: that it is essentially stable allowing access to 'the meaning of a past reality: a meaning that is enduring'[78]; that it can be accurately described using certain conceptual categories, such as author, date of composition, against which we are invited 'to test its authenticity'[79]; that this authenticity is secured against the site of its original production, or 'the person or group of persons [who] created the source'[80]; that there is a real distinction between genuine source-writing and later interpolation that can be traced through the material history of the textual

medium or 'elicited from the surface appearance'[81], and that there is some direct relationship between source-writing and past-reality that underpins the 'belief in the language correspondence of present word and past world'[82]. History could only secure its status as empirical science against its always-undermining status as a clearly literary pursuit by making precisely these kinds of assumptions, each of which help establish the written source as a testament to real past experiences.

Unfortunately the technological changes of the information age have had the effect of undermining precisely these assumptions on which history established its idea of a knowable past. They undermine the 'reliable' source by destabilising the qualities against which it becomes empirically 'testable', exposing history's ideas about the nature of writing as entangled with the influence of print reproduction. This becomes clear in the information age because often the kinds of questions posed in source-criticism simply make no real sense when applied to the products of digital culture. Tosh insisted that 'written sources are usually precise as regards time, place and authorship'[83], but digital texts are rarely precise in quite these ways. Writing emerging in collaborative environments does not always have an author as such, cannot always be associated with a single place or date of writing, or to an office or person who is supposed to have produced it. Elton suggested that 'the real meaning of the surviving materials must be elicited from the surface appearance'[84]. But the highly mutable nature of digital writing, in which the same works may be re-presented very differently within different media and computing environments, means that the form of the document is often no real indicator or source or provenance. Because of their dematerialisation, the authenticity of digital texts cannot be traced against any material history. They neither wither nor fade. Unless deliberately corrupted they survive unblemished or not at all. The empirical tests against which the authenticity of sources is secured break down under conditions of a mutable, malleable and volatile digital record.

This raises a more fundamental problem with the idea of the already historicized record as it relates to the products of digital culture. Scholarly history had assumed that aside from any deliberate interpolation in the historical record, the effects of which can be guarded against by rigorous empirical analysis, the historical sources would present themselves more or less as originally created, albeit reflecting only a fraction of what must once have existed and bearing the scars of their material history. But this assumption cannot be made of the products of digital culture. Its dematerialized nature means the digital record can be rewritten by silent hands at every turn without leaving any trace of that intervention; only convention dictates intervention should be recorded, and such conventions are dependent on intrinsically unstable socially and politically situated practices. This potential mutability creates an inescapable uncertainty about the genuineness of digital source-writing; empirical analysis cannot penetrate the dematerialized artefact to confirm its authenticity against its material history. As more of our lives are documented only in the digital realm, context-based source criticism techniques also begins to founder; the entire context becomes as untrustworthy as the individual record. The hybrid nature of digital writing, situated somewhere between the spoken and the textual work, undermines the reliability and provenance of the digital trace, and its correspondence with any real experiences it may purport to both contain and explain. Much like the histories that emerge in the oral tradition the knowable past must perhaps inevitably give way to an expedient past that quickly forgets inconvenient truths and forever rewrites itself with every generation to reflect changing concerns[85]. The past and the trace have become irrevocably detached.

There are two ways to respond to this apparent intransigence of digital artefacts to those presuppositions history incorporated into its interrogation of source-writing. It may be that they are so different in kind from the historical traces to which we are used that they cannot be regarded as historical sources in any traditional sense. In this case the history of digital culture becomes impossible until new ways are found to establish the provenance and authenticity of its source-writing; we are bought to the cusp of a new dark age or the end of history. On the other hand it may be that the tacit assumptions about the status of the historical record that make possible the idea of a knowable past are simply wrong. While our values are still largely those of the print tradition, digital textuality is not quite the same. Digital texts resist final signification and stability. They resist final classification and stable contextualisation. They are always straining at the edges of their own meaning. But digital

texts perhaps only reveal the resistance of all writing to final signification and closure. The medium of writing itself has not changed in any particularly significant way, only the *media* within which it is embedded and inscribed, and their concomitant modes of production and reproduction. If those superficial changes seem to expose new potentialities, new kinds of creativity, new kinds of ephemerality, a new mutability, and a new intransigence to final signification, then we are entitled to question whether these were in fact qualities always present in the written record but to which we had blinded ourselves. And if so we arrive at the worrying proposition that the mutability of the digital record threatens not only the possible histories of the information age, but the validity of all historical enquiry pursued through interrogation of the surviving traces of the past. Not only our future histories, but the whole idea of a knowable past is undone. This is an unsettling idea, but appears nevertheless to be an inescapable outcome of the ways digital communications technology are changing our understanding of the qualities of the written word.

Derrida has suggested that the 'death of the civilization of the book' is inaugurating a 'new mutation in the history of writing, in history as writing'[86]. Where Collingwood famously characterized all history as the history of thought[87], Derrida implies it is merely the history of writing itself; an affect of the civilization of the book or a kind of trace irreducibly inscribed in the relationship between written artefacts of different kinds from different eras. This suggests that history and writing are inexorably bound; more than merely a literary activity, the idea of history is literally *exhausted* in the written work. The past is fabricated in writing; there is no knowable past outside of the text. One reason for suspecting this arises from the dissolution of the linguistic sign central to poststructuralist theory. Elsewhere Derrida argued that a logocentric bias in Western philosophy distorted our understanding of writing; dominant correspondence theories of language entailed a pervasive 'metaphysics of presence' in which external reality is said to be re-presented to the mind through language[88]. Saussure's critique of the sign implied that meaning was deferred through the chain of linguistic difference[89]. Writing involved what Barthes described as 'the generation of the perpetual signified'[90] and Eco as 'unlimited semiosis'[91]. Any correspondence of world and word was lost in the self-referential play of language; reality slipped away in the spaces between signs. This also implies the lack of a real phenomenal past in historical accounts. The past becomes a construct in the play of signification; a way of 'drawing a line around a vacant place in the middle of a web of words, and then claiming that there is something there rather than nothing'[92]. The dissolution of the linguistic sign is also therefore the dissolution of the phenomenal past in historical accounts.

Although controversial, this idea emphasizes a troubling complicity and duality in history's relationship with writing: it is both the subject of historical representation and the medium within which representation is embodied. This complicity is partially concealed by a distinction that generally emerges in history theory between the two uses that history makes of writing: the predominantly written traces of the past (primary sources), and their re-presentation in predominantly written historical accounts (secondary sources)[93]. This distinction establishes a hierarchy of values that insulates the putative authenticity of the historical trace from those various interpretations in which it is given voice, and between which it is subsequently made arbiter. By securing history against the surviving record it apparently resolves any lingering suspicion that the past is constructed only in the historical text. But it creates another problem, opening up an epistemological gap between history and the past that it is difficult to close. Into that gap were poured the metaphysics of the text that helped secure the reliability and validity of source criticism. Theories of history can be characterized as those various attempts to stitch the absent past back into historical accounts without fully collapsing the history/past dichotomy. Nevertheless there remains something troubling in this generally unacknowledged complicity, and in the failure to explore its consequences. It is difficult to untangle the two uses of writing to reveal the phenomenal past. Historical scholarship looks suspiciously like a hall of mirrors in which its own image is projected onto the past into infinite regress.

An illustration of this effect emerges in Carr's argument concerning the constitution of historical fact. Carr suggested that 'the belief in a hard core of historical facts existing objectively and independently of the interpretation of the historian is a preposterous fallacy, but one which it is very hard to eradicate'[94]. Claims about the past are transformed into historical facts only when the accounts in which they appear are subsequently cited in other works[95]. The facts of history are generated in the discourse of history; primary sources are both subordinate to and largely a product of the secondary historical text. Although

controversial, most criticism of this argument concerns Carr's careless conception of *fact*, rather than the process by which particular claims are authenticated within historical writing[96]. But the social process that Carr described itself suggests that scholarly history is only engaged in rewriting and reworking previous accounts. History becomes an elaborate language game played-out between historians according to tacitly agreed rules that legitimize individual interpretations, rules that do not formally address the past but only particular uses of writing. History occupies the spaces between the record and the past and does not seem to belong to either.

      This socially situated process of rewriting history dissolves the distinction between primary and secondary sources and with it the idea of the knowable past. The primacy of a source is constituted in the historical account itself; it is inscribed within and mediated by the historical text. But the distinction remains important precisely because its helps secure history's 'reality effect'[97]. Barthes argued that historical scholarship exploits a sleight of hand in which the referent constructed in the historical account is projected onto a past to which it does not belong and subsequently used to validate the very accounts in which it originated[98]. This places history in Barthes' category of *mythology,* a 'second order semiological system'[99] in which sign (in this case the historical account) and signified (the historical source) together form a new sign without concrete referent (the past). The rigorous distinction between primary and secondary sources, the classification of evidence, and the props of scientific discourse all help disguise the process through which the historical past is fabricated in the text. History therefore secures its apparent objectivity by assuming a particular discursive form with agreed conventions, and by projecting its own image onto the records of the past. Each helps validate historical claims, but only against the rules of its language game. History can never transcend that language game to root itself in the knowable past. It is in this sense that history becomes 'our lost referential, that is to say our myth.'[100] History has assumed that the meanings of past realities are contained within source writing, revealed by critical analysis. Post-structuralism suggests conversely that meaning is not intrinsic to texts, but imposed by the various interpretive categories we bring to them.

      The new mutation of writing accompanying the technologies of the information age does not dislocate the knowable past from the surviving written traces, but exposes the knowable past as a vanishing referent. The value of writing as a record of previous experience is secured against the idea that sources emerges at specific points in time and space as a result of the deliberate acts of identifiable persons, and inscribe meanings that reflect the experiences of those persons accurately, duplicitously or otherwise. In the more participatory spaces of digital culture these associations apparently break down; the mutability and malleability of digital writing transform it into simulacra: signs sign without referent[101]. Real historical experiences are therefore difficult to anchor against particular written artefacts. But the original creative act against which the authenticity of the text was always only a 'useful fiction' implying an unmediated access to intentional meanings that does not withstand scrutiny. Printing helped impress the idea of an ontologically stable text by petrifying writing at stages in its ongoing production, but all writing in whatever medium is already rewritten in a number of complex ways. They involve the working-over and assimilation of other written artefacts, often betraying what Bloom described as the *anxiety of influence*[102]. They are therefore subject to 'the intertextual in which every text is held'[103], being composed from allusions that are 'anonymous, untraceable, and yet *already read'* being 'quotations without inverted commas'[104]. They are complicit in the conventions of particular textual practices, from administrative processes through to the literary work. The text can never escape its enmeshment within the wider fabric of literary culture. It is hemmed in on every side by the patterns of linguistic practice, moulding the writings on which it consciously and unconsciously draws, and being itself moulded by subsequent works. If the meaning of source-writing cannot be secured against the real historical contexts in which it was produced, then the experiences is inscribes cannot be directly reveal specific historical realities.

      By changing the contexts within which writing is produced, transmitted and consumed, digital technologies merely make explicit what post-structuralism implied: both that writing is simply not the kind of medium that scholarly history assumed, and that it is unable to carry meaning in the stable and enduring ways history demands. History had assumed that any meaning its source-writings convey corresponded to some real historically situated intention, whether or not reflecting things 'as it really was', as it appeared to be, or only as the writer would have liked us to believe them to have been. In this finality of meaning the creators of the traces of the past are re-presented to us in their own unchanging words,

forever condemned to testify to their own apparently intentional meanings. The idea that meaning is never more than interpretation, and that interpretation is always already historically embedded, so that rather than the sources revealing their meaning to us we instead impose on them our own meanings is incompatible with this. By highlighting the mutability and lack of finality of all texts, that intentionality is not involved in meaning, that the traces of the past are lost in the play of history, and in particular that both medium and message are historically situated and temporally contingent, digital technologies exposes scholarly history's claims to uncover the true meanings of a objectively knowable past as a fiction. The vanishing referent in digital culture reveals Collingwood's assertion that all history is the history of men's minds as a fallacy, reflecting only the capacity of print reproduction to construct a metaphysics of presence out of the written word in which the figurative voice of the past comes back haunt us. History is no more the history of men's minds that it is of a true past; it is only the history of historical writing itself, and more than that the history of writing as record: the persistent trace of our attempts to assimilate previous experience into our own lives. We have not been plunged into historical darkness in the digital age, only made to recognize the little gloaming light we saw previously as darkness made visible by desire

What then is left of the idea of history? Does history really lack all possible meaning in the information age? If the information society has in some ways undermined history, in others the past is an ever more immediate part of our social lives. Digital technologies perhaps allow a more democratic participation in historical discourse. Services like the British Library's *Turning Pages,* the digitisation of the national Newspaper Library, Google Books, and the Census online open up access to the historical record, and in a very real sense do change our relationship with the past. Through them the long tail of historical record is put on public view. This has enabled new increasingly personal kinds of histories to emerge, exemplified by the popularity of genealogy, local history and life histories. Technology has allowed new kinds of specifically non-textual sources to contribute to our idea of the past, such as the oral history collection of the Imperial War Museum. It has also allowed marginal histories to find voice in digitally mediated social networks, as people come together across the world in new ways. And technology is creating new ways to experience history in film, television, video games and simulation. The immersive multimedia environments of *Jorvik*[105] and *The Canterbury Tales Visitor Attraction*[106]*,* or the anachronistic mash-ups of films like *A Knight's Tale*[107] and games like *World of Warcraft*[108] are in many ways no less authentic *representations* of the past than the equally fabricated reconstructions of scholarly history. In the process of making plain the influence of their medium, they reveal how scholarly history had always concealed the fictive and peculiarly literary bias of its own. The fascination with the information apparent in all spheres, from science to the humanities and social sciences, offers a real opportunity for information history to synthesise divergent aspect of contemporary experience.

The truths of history in the information age are not inscribed in the historical text, but remain contingent and plural, emerging in the whole social process, through the entire *structure of feeling* in which we are inevitably already historically entangled. This may seem to imply that history becomes subject to an unrestrained relativism where all accounts are as good as any other, robbing history of any meaning. But the anxiety that attends to the possibility of historical research in the digital age reflects only the loss of certain kinds of claims about the true nature of the historical past, not the loss of all possible rational discourse in relation to history. Are there criteria other than the true meaning of the past against which to secure history? Ankersmit argues that 'it is an empiricist superstition to believe that no such criteria can be conceived of and that prejudice, irrationality, and arbitrariness are the only options'[109]. By any reasonable assessment scholarly history was able to ground its claims more securely than other kinds of history, albeit in a way always undermined by the refusal of the past to fully divulge its secrets. But that security was bought at the cost of the diversity of experiences classified as *history.* On one level this can be framed as a means to tacitly privilege particular dominant discourses through the apparatus of power in the ways that many post-modernist history theorists imply[110]. But more importantly it involves real choices about what we understand history to be. Ankersmit argues:

> The (im)plausibility of historical accounts only manifests itself in the presence of many such accounts […] Hence, the more accounts of the past we have, and the more

complex the web of their agreements and differences, the closer we may come to historical truth[111]

The plurality of history matters not merely as a means of warding off society's tendency to marginalize the experiences, traditions and beliefs of the disempowered, but also as a means of furthering our historical understanding. It allows us to choose not only between histories, but also between ways of writing history, and ways of engaging with the past. Ankersmit notes that 'we will sometimes find ourselves [...] not being able to distinguish between truths *de dicto* and truths *de re'* adding that that truth is 'not the arbiter of the game but its stake'[112]. Scholarly history measured itself against an extrinsic truth: the correspondence of the historical account with 'the meaning of a past reality'[113]. This inevitably tended to atomise the whole notion of historical truth in the verifiably factual statement, which never sat comfortably with the literary nature of the historical account. By contrast, the unanchored spaces of digital culture necessitate the foregrounding of intrinsic truth-judgements. The truths *de re* remain beyond our grasp, but the truths *de dicto* can be tested, not through correspondence or world and word, but correspondence of word and word. The internal consistency of historical accounts, not the external conditions under which they can be regarded as true of false, becomes critical to the ways in which we choose between versions of history. Thus we can continue to dismiss those kinds of accounts that claim the status of scholarship without embodying that claim. We can continue to reject those accounts that contradict the body of evidence, neither because they fail to reflect any true nature of past experiences, nor because they are superficially falsified by surviving evidence, but only because their claims to truth are contradicted by the manner in which those claims have been constructed and presented. Self-consistency in the historical work will come to matter more than its consistency with a true past.

So history has meaning, the past has a future, but not of a kind imagined in the period of high-modernity. The death of scholarly history is only a rebirth of the lived social history in which the past is open to reincorporation into present experience rather than rigorously regulated by the academy. In many ways this represents only a relinquishment of the shackles of empirical enquiry. This does not mean of course that there will be no more scholarly empirical history. It implies only that scholarly history represents one of the many new and emerging ways of forging a relationship with the past; neither necessarily better than all the others nor necessarily worse but only a different kinds of situated discourse with its own traditions and assumptions. The potential of digital culture is in its essentially limitless cultural bandwidth. We are not obliged to squeeze all possibly, acceptable or permissible meanings into the limited medium of the printed book, the network television channel, or the national newspaper. Endlessly proliferating, essentially unlimited and often inaccurate information is all we have. Regulation of this new historical expanse is neither particular possible nor particular desirable; better to simply explore the very different kinds of stories it may disclose. Information history is in a unique position to develop a better understanding of how the shifting qualities of information itself, and our changing attitudes toward information artefacts might transform both our historical consciousness, and how we understand the already historical past.

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[11] Tosh for example argues that 'the study of history has nearly always been based squarely on what the historian can read in documents or hear from informants. And ever since historical research was placed on a professional footing during Ranke's lifetime, the emphasis has fallen almost exclusively on the written rather than the spoken word. [...] For the vast majority of historians, research is confined to libraries and archives'; TOSH, John (1991), *The Pursuit of History: Aims, Methods and New Directions in the Study of Modern History; Second Edition,* London & New York: Longman, p. 31.

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[23] For example Brand writes: 'If raw data can be kept accessible as well as stored, history will become a different discipline, closer to a science, because it can use marketers' data-mining techniques to detect patterns hidden in the data. You could fast-forward history, tease out correlated trends, zoom in on particular moments'. (Brand, 1999). Although naive, unreflective and uncritical, Brand does highlight how digital technologies might enable us to rethink the relationship between the past and the present, and pursue a different kind of history

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[36] Marwick for example lists nine different classes of historical record: Document of Record; Surveys and Reports; Chronicles and Histories; Polemical Documents and Media of Communication; Archaeology, Industrial Archaeology, History on the Ground and Physical Artefacts; Literary and Artistic Sources; Sources which are Techniques as much as Sources, and 'Oral History' (MARWICK, Arthur (1981), *The Nature of History; second edition,* Basingstoke: Macmillan Education, pp. 139-141).These appear to be in order of their validity as evidence.

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