

The cultural politics of reading nineteenth-century journalism in a digital age

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*'Only connect...the prose and the passion, and both shall be exalted....
Live in fragments no longer.'*

E.M. Forster, *Howard's End* (1910).

Abstract

If we wish to connect the many fragments of the communications media of the past to form a more cohesive understanding of a nation's cultural impact through periodical print, what methodologies do we need to achieve that end? Do digital resources, with their vastly enhanced searchability and (reputed) accessibility, help us realise that ambition? Or do we need to attend with far greater care to issues of language, discourse, translation, the multifaceted relationship between print languages and the growing global dominance of English, the tensions between the diaspora and the metropole? Do digital resources assist or obfuscate the task of asking the key questions our discipline needs to address through research, and if so how and with what effects and outcomes? The paper contends (a) that the theorisation of digitised print remains in its infancy, and (b) that the core issues of identity, cultural specificity and durability, and the priorities and perspectives that become embedded within them, are still there to be explored, albeit potentially at least in more comprehensive ways, in a digital age. In conclusion, the paper takes the view that while the digitisation of historic journals raises fresh difficulties, it nonetheless creates significant new possibilities for research in the culture of periodical print.

Thank you for the kind invitation to deliver this lecture here at Panteion University in Athens tonight. We in the print history community in the UK are excited about the work being done here on the global history of the Greek press, and very much want to collaborate with you and to learn from you.

I must begin by apologising for my excessively long and overblown title. Perhaps if I unpack it a bit at the start it may become a little more comprehensible. A lot has changed in the ways we access

information since I started my own research on periodicals history back in the late 1970s. (Slides 1-3). Most dramatically, we have seen the digitisation of so many newspaper and periodical titles. This has certainly been convenient for scholars, but it has not been unproblematic, and I will argue that we need to pay close attention to the issues that arise from it. Those issues might, of course, vary greatly between different places, cultures, political circumstances and academic environments - that's what I mean by the cultural politics of reading, conceived of in the very broadest sense. So while I will draw very specifically on my own experience, I do so knowing that it may not compare very well with that of others of you here. But let's see, at least, if there are any useful points of contact.

I have three starting points:

1. the first is the fragmented nature of the periodical as a cultural form - it is multilingual, it's fractured ideologically, geographically and in format, it is time specific yet it is both synchronic and diachronic. Looked at longitudinally, it ticks away like a clock. That clock might be ticking fast, like a daily newspaper with many editions, or more slowly, like a weekly or a monthly magazine, but the clock is always ticking, its periodicity a sign of its time-bound nature, the one that defines our interest in it as historians. Periodical print marks out the passage of time in the way the modern, industrial world understands it, or has imposed upon it in a Foucauldian act of social discipline. Each form had its function – morning newspapers, evening editions, Saturday reviews, the voluminous Sundays – and each form also had its implied target. For example, in the UK, the cheap evening daily newspaper, and later the early-morning editions too, mainly came about as a response to rail travel, as commuters, mainly middle-class men, travelled to work in a new urbanising economy, one whose social arrangements created periods of 'empty time', a prime site for the delivery of advertising, and one that commercial print aggressively sought to fill. But a material social history of print can only take us so far. So can something also be said about the larger cultural impact of print? For example, about a nation's cultural expressiveness, and the effect it has on its own development, its capacity for self-reflection, and the broader influence it may have on the world when it harnesses for its own purposes the technologies of print ? To explore those questions, we need to move beyond the fragmentary nature of print, or rather to draw together its fragments into a more cohesive understanding of how periodical print, cumulatively, can affect the society that creates and consumes it. We can do this in at least two ways:

2. One is theoretical. Benedict Anderson's 1983 notion of 'print language' is a powerful one that even today remains insufficiently developed. Yet it has proved to be immensely helpful for press historians, as well as theorists of nationalism, to work with and to think with, encapsulating as it does an idea about a communications system that speaks a common language of identity and inclusivity, one that delineates a new geography of the mind, and one that for Anderson was thus also a foundational step in the creation and maintenance of an imagined national narrative.¹ Anderson's explanatory platform was the use he made of concept of 'print capitalism', whose print-languages 'created unified fields of exchange and communication' that 'gave a new fixity to language, which in the long run helped to build that image of antiquity so central to the subjective idea of the nation'. By so doing, print-language became a language of power, establishing linguistic hierarchies of dominant and subordinate dialects. So far so good, but where many, myself included, parted company with Anderson's thesis was at the point where he insisted that all this was the outcome of '*largely unselfconscious* processes resulting from the explosive interaction between capitalism, technology and human linguistic diversity' (my italics).²

The problem with the Anderson thesis is that while many are intrigued by it, and find it helpful and creative, few wholly buy into it. Critics such as Anthony Smith have argued, with much justification, that modern nationalism did not spontaneously erupt from the pages of print capitalism, and that new élites often tapped into deeper historical (or invented) roots to legitimate their aims. Those élites were also focused on particular social agendas, which themselves embodied the interests of specific ruling or emergent social constituencies. What the thesis *does* succeed in doing, however, as Marilyn Butler argued shortly following the publication of Anderson's *Imagined Communities* in 1983 but only published posthumously this year, is to open the way for a closer and different reading of the content of print-language not simply as a constitutive element in the making of global modernities, but as 'the thing itself', the very substance of the ideology/mythology of national identity.³ The question periodical historians need to ask, then, is what precisely *is* this 'print language', how can we recognise it when it emerges historically, and how might it be shaping our reading of the journalism of the past as we try to move beyond the fragments of the present to

¹ Benedict Anderson, *Imagined Communities: Reflections on the Origin and Spread of Nationalism*, Verso, revised edition 2006.

² Smith, Anthony, *Nationalism and Modernism: A Critical Survey of Recent Theories of Nations and Nationalism*, Routledge 1998, pp 137-142.

³ Marilyn Butler, *Mapping Mythologies: countercurrents in eighteenth century poetry and cultural history*, Cambridge University Press, Cambridge, 2015, Kindle edition, Loc. 4780-4790. I am grateful to Mary-Anne Constantine, University of Wales Centre for Advanced Welsh and Celtic Studies, for drawing my attention to this reference.

obtain a more over-arching, totalizing even, grasp of the rôle performed by print-language in its entirety.

3. The other is more methodological, and is made possible by the acceleration of digitisation during the past twenty years. We've all long known that there are both advantages and disadvantages to the reading of digitised periodicals. In a nutshell, one can say that more people have the capacity to see fewer titles (so far), thus more reliance in research tends to be placed on a narrower range of sources, with consequences for the conclusions we draw. It has been said that we used to be divided into people who were digital natives and those who were digital immigrants, whereas now we all are all of the Google Generation. But beyond that rather obvious point about digital access to 'big data' lies a broader set of questions about what it can mean to 'read' a digitised periodical. Do we interrogate it differently, find fresh ways of constructing its possible meanings, or draw other kinds of inferences from the text about the effects of print-language on the social formations of the past? It is this set of questions that we should, I think, now address as a community of print historians.

Please bear in mind, though, that I tend to see all this through a predominantly, and limiting, UK perspective, one that brings its own mosaic of fragments – its language diversity and multiple identities, regional and national, that have gone through, often simultaneous, processes of coexistence and conflict amid fears that the press is somehow subverting social order and, more recently, democracy itself. The UK perspective also implies taking into account a broader diasporic press, and the global cultural networks that emerged alongside it during the extension of the British Empire and after its fall in the post-colonial era. The study of the press in the UK, as of the broader communications media, has also often been driven by an anxiety about its social role, an anxiety that itself has a history and a context.

It's worth reviewing these issues now since we are, all of us, at a moment of transition. We need to take very careful stock of where we are as a community of communications historians, forming as we do a very specific sub-branch of the disciplines of history, political science, literature and cultural studies. So where do we want that sub-discipline to go next, and what are the obstacles that may prevent us from getting there? The key, for me at least, is the need to defragment the historical study of the press - geographically, linguistically and culturally. First, though, let me try to explain in more detail what I mean by 'fragmentation', a task which is possibly most easily carried out, if you will forgive me, by means of a little autobiographical detour.

Much of my early 20s was spent in the old British Library Newspaper Library in Colindale in north London, diligently reading my way through every word and column and printed page of the three-year lifespan of a single nineteenth-century newspaper title, from 1873 to 1876. My job was to use the press to gather source material about the reform and labour movements in what was then seen as a rather dull period between the fall of the great popular democratic movement of Chartism in the 1840s and the growth of modern socialism in the 1880s. That, at least, was what I was supposed to be doing, what my supervisor had told me to do. But what I soon realised I was *really* doing was trying to work out what it took to keep this weekly periodical, this physical object, going – as a weekly newspaper and as an idea – and what difference, if any, it was making, or its producers and reader-contributors believed it was making, to the world around them. For me, that endlessly fascinating fragment of the newspaper press of the 1870s had become not so much my source for a bigger study of political movements, but my *subject*.

With the best will in the world, back then it was not the easiest distinction to explain. After all, many respected practitioners of my discipline didn't regard press history as being 'history' at all. The infantilisation of cultural history took time to shift, but thankfully shift it did. But my main problem back then in the late 1970s was this - if the press really was the *subject* of my research, and not a source of information for the study of some other social phenomenon, at what level should it, could it, be addressed? Should it be at the level of a unit of writing, or the juxtapositions of the page, or the title as a whole? Should it suck in biographical studies of editors, writers, proprietors, printers? And should it extend even further outwards to encompass the development of printing technologies, the emerging 'profession' of journalism, the relationship between the title, elites, reader groups, and advertisers at the level of the locality, the city, the nation? Or were all of these indispensable elements in the writing of a 'total history' of the press as a social practice?

With hindsight, the advantage of reading every word of an entire lifecycle of a newspaper title, in its original print on paper form, from birth to death, so to speak, is that it drenches you not only in the immediacy of the text, its idiosyncrasies, its often broken, disrupted narratives, the quixotic delusions, enthusiasms and sometimes downright cynicism of its editor and writers, its use of illustration and selection of advertisements, but also its mistakes, its unreliable typeset print, the heft and feel of the paper. All good, revealing stuff, and I still think direct engagement of this kind with the original to be as essential for a periodical historian as it is for an art historian.

But what it doesn't necessarily allow you to do is to look much beyond the specific title, to see it as part of a larger process of social production. You only see the fragment, not the whole of which it's

a part. Of course, it's entirely fair to ask whether we need to go beyond the fragment at all, and some do ask that. Don't the semiotics of the specific give us more than enough to be getting on with? Cannot the fragment somehow speak synecdochically for the whole? These are all fair questions.

But as it happened, my chosen little fragment of the nineteenth-century press was one of those rarities, a single weekly title written in two equal halves in two different languages. And the one was never a translation of the other. The two sides of this particular example shot arrows poisoned by party polemic, religious sectarianism, class bile and a dizzying range of radical fads (anti-vaccination zealotry being only one among many) in different directions at different targets. While they spoke in very different authorial voices, they were in fact written by the same physical hand (who also, incidentally, typeset, printed and distributed the entire weekly run). It was, then, in a sense, already two closely-related fragments in one. So, what do you do? Do you textually analyse what's there in front of you, within the confines of the title? Or do you focus on the tensions between the two halves, and then follow the arrows they both shoot out at others in the virtual environment? I started to follow the arrows, and found them embedded in their intended targets, in the comment columns and letter pages of other titles, where other hidden voices were engaged in a virtual conversation, across time and space, periodic dialogues that sometimes coincided with very physical confrontations, street meetings and town-centre stand-offs. What one could find there, in the social spaces between the titles, was, in effect, a print internet, but one without a search engine, a dark but very real information web. So for me, going beyond the fragment took me into a vast communications network, of which each fragment was a necessary and constitutive part.

Now, looking back after nearly 40 years, a key question I have to ask is this: could it all have been done differently if those titles had been digitised? Would I have bothered to read them all? Would I have asked other questions and tested other hypotheses. Would I have read and made sense of the text in the same way? James Mussell's excellent book on reading nineteenth-century periodicals in a digital age is interesting on this point, he argues that we consume print and digital information in very different ways.⁴ And it's hard for me to disagree with him. But they are, it seems to me, closely related forms of discourse. I also have an interest in visual arts and photography, and in some respects I've found it helpful to conceive of the differences between print and digital through invoking my different responses to still photography and film. It helps me think through some of the possibilities, at least.

⁴ James Mussell, *The Nineteenth-Century Press in the Digital Age*, Aldershot: Ashgate 2007.

What I am pretty sure of, though, is that having digitised versions of those titles would not have helped with the assessment of their factual accuracy, or the extent to which its content was deliberately, or otherwise, misleading. So when reading the digitised text, we still need to apply the same analytical skills we routinely employ with its analogue form.

But could digitisation have helped with the problem of fragmentation? To address that, we need to pull back a bit and consider the way in which the history of the discipline of Victorian periodical research has developed over the past half century or so, where it comes from and where, collectively, we want it to go to.

The key intervention in finding a way to reach beyond the fragmentary nature of the periodical as a cultural form into a broader way of thinking about periodical literature came from the pioneering work of Michael Wolff, Rosemary Van Arsdel, Joanne Shattock and others in *RSVP* and *VPR*, and their work came as a revelation to me. As early as 1966, Wolff had characterised the periodical press as a 'Golden Stream', one that could be charted, a stream whose gushing waters I guess we're all still trying to negotiate. Wolff's and Joanne Shattock's *Samplings and Soundings* of 1982 tested the temperature, but the vastness of the periodical in itself, as a social and cultural and political phenomenon, had already been opened up – it was now more of an ocean than a stream.⁵ And what an ocean it was! How rich its potential for connecting local, regional, national and international networks. We've seen major strides over the past two decades in trans-European, Atlantic and Imperial periodical history, which are all steps on the journey towards a better, more empirically grounded understanding of today's emerging global information economy. It also demonstrates all too clearly that the emerging picture is not, and cannot ever be, Anglo- or even Euro-centric.

But the reason for wanting to set sail on this ocean, this inviting, open frontier, wasn't simply because it was there. Other golden streams flowed into it, streams of writing that foregrounded, even required, the critical study of nineteenth-century journalism. If we call this for convenience, if not accuracy, the historiographical stream, it's important to bear in mind its power, both in the mid-20th century, and its continuing salience in the present. Let's take a few samplings and soundings of our own from that rich twentieth-century British historiography, that long search for a holistic approach to the study of the periodicals of the past.

⁵ Joanne Shattock and Michael Wolff, *The Victorian Periodical Press: Samplings and Soundings*, Leicester University Press/University of Toronto Press, 1982.

From C.D. Collet's 1899 study of the campaign against the taxes on knowledge to Jane Soames's *The English Press, newspapers and news*, of 1936, we see ever greater attention being paid to the massive increase in newspaper circulations since the 1880s. Soames had argued that 'by appealing to a class of readers unaccustomed to buying the newspaper regularly', during the course of the 19th century, proprietors had 'perfected their 'technique', and as a consequence a "newspaper habit" (was now) practically universal in England'.⁶ Like smoking, Collet's work, significantly I think, was republished in 1933, and it helped to rekindle a concern about press power. The erstwhile editor of *The Times*, Wickham Steed, admittedly a man with a chequered history who was himself no stranger to kow-towing to Lord Northcliffe's Germanophobia and anti-semitism, could by 1938 regard the Press that had emerged from the 19th into the 20th century as 'the central problem of democracy'.⁷

Kate Gibberd, in her volume *Citizenship through the Newspaper* of 1939, imagined a more integrative and inclusive role for the press, much like the then still young Reithian BBC, while Hugh Cudlipp levelled accusations of the deception and manipulation of readers by the likes of Northcliffe and Rothermere, and Kingsley Martin's polemic of 1947, which set the scene for the Royal Commission on the Press that started that year, noted the depth of public concern about the legacy of the late Victorian press, in particular the way power was being wielded by the national dailies, as indeed did films like Orson Welles' *Citizen Kane* of 1941.⁸

Out of those concerns came a stream of insightful post-war studies, Richard Hoggart's *Uses of Literacy* in 1957, Raymond Williams's *Culture and Society* in 1958 and the *Long Revolution* in 1961, Edward Thompson's the *Making of the English Working Class* in 1963, some of whose themes were taken up and elaborated for example by Joel Wiener in his *War of the Unstamped* in 1969. I often forget how much attention is paid to the early 19th century periodical press in Thompson's explosion of a book. The lineage continued through the work of Stuart Hall and the Birmingham school of Cultural Studies, Benedict Anderson on the press and 'imagined' geographies in the making of modernity, and the work of Patrick Joyce at Manchester. This in no sense constitutes an exclusive canon, and there are surely other streams consisting of political science, social anthropology and other disciplines that run parallel to it. But what those studies,

⁶ Jane Soames, *The English Press: newspapers and news*, London: L. Drummond limited, 1936, p.51

⁷ Henry Wickham Steed, *The Press*, London: Hammondsorth, Penguin, 1938, see in particular "The Press and the State", pp. 66-80.

⁸ Kate Gibberd, *Citizenship through the Newspaper*, London: J.M. Dent & Co, 1939; Kingsley Martin, *The Press the Public Wants*, London: Hogarth Press, 1947.

different as they were, tended to have in common was an effort to link social change to a theory of culture, and above all to the power of communications to construct and sustain imagined orders.

As recently as this year, Yuval Noah Harari argued in his monumental history of humankind, *Sapiens*, that imagined order is neither objective nor subjective, but inter-subjective, a province that 'exists within the communication network linking the subjective consciousness of many individuals'. He goes on to claim that 'many of history's most important drivers are inter-subjective' in this manner, citing as examples 'law, money, gods, nations'.⁹

Note his insistence that they operate 'within the communication network linking the subjective consciousness of many individuals', which again connects us to Andersons's imagined communities.

So all of us here who work on the communications networks of periodical writing *as our subject* stand in a tradition, or more accurately, a lineage. We'd be stretching it if we claimed that it extends back to eighteenth-century Enlightenment radicalism but we can I think date it with some certainty to the stock-taking exercises of the inter-war years of the twentieth century when critics speculated freely and seriously on the effects that 50 years of a mass press had had on social behaviour, and brought different academic disciplines into play to try to make sense of it all. That lineage, we could argue, continued right through to the 'cultural turn' in Europe and North America in the 1980s and early 90s.

Then came the internet and the digital revolution, ushering in a new kind of resource with tools of such power that placed us, within twenty short years, in a radically different position as periodical researchers. We were using email long before that, of course, and the Victoria web community was already well underway by 1995, but digitised nineteenth-century titles only really came available to us in significant measure after the mid-1990s. In 1998, an IFLA survey found that 92% of newspaper digitization projects world-wide had started since 1995, that was the year that things, generally speaking, really started to kick off.

The breakthrough for scholarship came with improved searchability, which allowed connections that would have taken days, weeks of effort to be achieved in analogue formats to be made

⁹ Yuval Noah Harari, *Sapiens. A Brief History of Humankind*, London: Harvill Secker, 2014, Kindle edition, Loc. 178801791.

instantly. And the tools are continually being improved. We are all used to search and highlights (SLIDE). The new free NLW on-line resource for Welsh newspapers 1800-1918 that were released this summer, for example, enables users for the first time, to call up all illustrations, or cartoons across all the digitised titles (SLIDE). This is what become possible when binary code meets old newspapers.

Refinements such as these have driven the expansion of the Digital Humanities as an approach, even as a field of study in its own right, by making it possible to link metadata across a highly diverse range of data sets – such as art collections, portraits, photographs, maps (the use of geotagging is particularly interesting right now), as well as written archives such as diaries, correspondence, Parliamentary, war, education and health records, and so forth. Anything that can be digitised, in fact, as long as the metadata is structured correctly. This holds out the real promise that we can dig deeper and faster into our fragments, and also to link them in a pretty much infinite set of combinations thus reconstruct long buried media networks within and across state frontiers.

Equally importantly, digitisation also opens up the promise of greater public accessibility to this material, either directly or through collaboration with other open platforms like Wikipedia, Flickr, Twitter (increasingly significant as journalism, which raises the question of how is it being recorded?) and many other community-driven initiatives. This public engagement can be harnessed in a host of ways. The National Library of Wales, for example, together with other public, on-line archival initiatives such as People's Collection Wales, is increasingly using crowd-sourced data to enhance its own holdings, an engagement with a broader audience that also holds out the potential promise, at least, of a degree of voluntary crowd-funding of future digitisation projects.

Funding is an interesting issue. The 1998 IFLA survey I mentioned earlier also found that the main drivers for the digitisation of analogue collections were, in descending order of priority, the enabling of public access to heritage, preservation and academic research. Only 7% of respondents cited commercial gain as a motive. Mass digitisation of historical collections, it appears, was from the start an essentially collaborative undertaking, whose value was measured primarily in terms of public benefit.¹⁰ National projects – Australia (SLIDE) to Denmark (SLIDE) , and further exemplified by the inclusion of newspaper digitisation as a public good in the European Union

¹⁰ Marie-Therese Varlamoff, Richard Ebdon and Sara Gould *IFLA/UNESCO Survey on Digitisation and Preservation*, 1999, p. 11

(SLIDE) – LIBER, Europeana – and as a priority area in the IFLA-UNESCO ‘Memory of the World’ programme, again dating from the transformative moment of the mid-1990s.

Now, there were different funding models, some major libraries, such as the British Library (BL), have collaborated with commercial software and publishing groups in order to raise the finance to do the job, others, such as the national libraries of Scotland and Wales, were entirely state-funded and free at the point of use to all – and remain so.

Now, a couple of points here. One, just like the nineteenth century periodical press before it, the current digitisation of Victorian journalism, in the widest sense, needs to be historicised. It has its own trajectories, some actually existing, some emerging, some perhaps only pipe-dreams, but they’re all part of the mix and they all need to be identified and understood. They also have different, often competing, rationales. Secondly, as newspaper circulations continue to decline, and as a handful of key titles like the *Daily Mail* and *Guardian Unlimited*, if we confine ourselves to UK examples for the moment, become global on-line resources (and for which, by the way, there are few very credible revenue raising business plans in either pay-wall or open access paradigms), we need to be awake to the ideas that are now forming around their impact, as indeed we have been to those that swirled around the nineteenth century press.

Take, for example, Matthew d’Ancona’s recent argument that across the globe now ‘a quite different form of politics is emerging, with a quite different structure. To borrow the jargon of semiotics, it is “synchronic” (cross-sectional) rather than “diachronic” (part of a serial narrative, with a before and after). It is governed by what Martin Luther King, in a very different context, called “[the fierce urgency of now](#)”. It recognises that today’s voters are the children of the digital Big Bang, bombarded with an unprecedented blitz of information, data and noise. They exist in bubbles of digital mayhem, less bothered by the future and the past than by getting through life moment to moment. Their universe is defined by the immediate and the deafening data stream. The contents of that stream are not ideologically coherent but they are identifiable’.¹¹

Now, some of us would want to interject here and say, hang on a moment, Matthew, the Victorian press was itself pretty overwhelming and in much the same way. Digital bombardment may well be different in scale, and in the intensity of its social intrusion, but information overload is certainly

¹¹ Matthew d’Ancona, ‘Jeremy Corbyn: in the new politics only the now matters’, *Guardian*, 10 August 2015.

not new. Less dystopic, or at least less chaotic, are some of the recent observations by Paul Mason (you'll note I've chosen to draw on two specialists here, a political scientist and an economist, both of whom are primarily engaged in periodical journalism). Mason's book on *Postcapitalism*, published this summer, implies rather easily that by digitising the periodicals of the past, making them freely available and researching them as sites of social memory and interaction, we're also participating in what he terms a new postcapitalist economy. Mason at this point steps back from the immediate present, and cites the work of a mid-Victorian writer.

Specifically, he refers to Karl Marx's 'Fragment on the machine', written as a thought-piece in London in 1858 but not published until the appearance of the *Grundrisse* in 1974. In it Marx speculates on the production and reproduction of what he termed a 'general intellect', or what we might today more helpfully think of as a 'public intellect'.

Mason begins by noting how, 'in the niches and hollows' of today's market system, 'whole swaths of economic life are beginning to move to a different rhythm.' He refers to the proliferation of 'parallel currencies, time banks, cooperatives and self-managed spaces...barely noticed by the economics profession, and often as a direct result of the shattering of the old structures in the post-2008 crisis.' I suppose he could have added some open-access journals to his list, but he concludes 'We're surrounded not just by intelligent machines but by a new layer of reality centred on information.'

'It's all very well to speak glibly about an information economy', he suggests, 'but a serious economist has to ask the question 'what is all this information worth?' how do you put a price on it?.' It's a very salient question – I was asked by a government minister once, in all seriousness, 'what, in monetary terms, are the collections of the National Library of Wales worth?'. I stuttered what I hope was a suitably gnostic reply, 'well, on the open market, they're worth several billion, but right now they're worth nothing because I can't sell them'. But, really, the honest answer would have been, 'I have no idea'. As Mason says, 'You won't find an answer in the accounts ... intellectual property is valued in modern accounting standards by guesswork. A study for the American SAS Institute in 2013 found that, in order to put a value on data, neither the cost of gathering it, nor the market value or the future income from it could be adequately calculated. Only through a form of accounting that included non-economic benefits, and risks, could companies (or archives and libraries) actually explain to their shareholders and users what their data was really worth. Something', he concludes 'is broken in the logic we use to value the most important thing in the modern world'. In other words, the new 'cognitive capitalism' just doesn't add up.

Historically, up to the end of the second world war, economists viewed information simply as a “public good”. ‘The US government even decreed that no profit should be made out of patents, only from the production process itself. Then came the concept of intellectual property. In 1962, Kenneth Arrow, the guru of mainstream economics, said that in a free market economy the purpose of inventing things is to create intellectual property rights. He noted: “precisely to the extent that it is successful there is an underutilisation of information.”’

Working backwards from Arrow’s coupling of innovation and IP as mechanisms to restrict public access to information, Mason muses that ‘if a free market economy plus intellectual property leads to the “underutilisation of information”, then an economy based on the full utilisation of information cannot tolerate the free market or absolute intellectual property rights. Thus ‘the most dynamic force in our modern world is abundant and ... “wants to be free”.’ That is to say, information as a social good, free at the point of use, incapable of being owned or exploited or priced.’ This incidentally, and co-incidentally, is almost exactly how my last remit letter from my Minister of Culture phrased the requirement for me to make all the National Library’s knowledge freely available to the widest possible range of users.

This observation leads Mason back to 1858, and the ‘Fragment on Machines’ in which Marx envisages an economy, the main productive force of which would be information, an in which organisation and knowledgemade a bigger contribution to productive power than the work of making and running machines. As Mason notes, it ‘suggests that, once knowledge becomes a productive force in its own right, outweighing the actual labour spent creating a machine, the big question becomes not one of “wages versus profits” but who controls what Marx called the “power of knowledge”.

In an economy where machines do most of the work, the nature of the knowledge locked inside the machines must, he writes, be “social”. ‘In a final late-night thought experiment Marx imagined the end point of this trajectory: the creation of an “ideal machine”, which lasts forever and costs nothing. A machine that could be built for nothing would, he said, add no value at all to the production process and rapidly, over several accounting periods, reduce the price, profit and labour costs of everything else it touched.’

‘Once you understand that information is physical, and that software is a machine, and that storage, bandwidth and processing power are collapsing in price at exponential rates, the value of Marx’s

thinking becomes clear. We are surrounded by machines that cost nothing and could, if we wanted them to, last forever. This may be what Marx imagined would happen if information came to be stored and shared in something called a “general intellect” – which Mason summarises as ‘the mind of everybody on Earth connected by social knowledge, in which every upgrade benefits everybody. In short, Mason concludes, Marx had imagined something close to the information economy in which we live. And he also noted that should it ever come to pass, its existence would “blow capitalism sky high”.¹² Mason’s words.

But even if Mason got his economics right here, and there's an unstoppable historical drive towards a digital future in all things, he does have his critics, and, as ever, there are tensions in his analysis. Four in particular we need to be acutely aware of.

One, in May 2010 James Murdoch ominously attacked the BLs national newspaper digitisation plans as a challenge to the commercial model. With his father Rupert, Rebekah Brookes (welcome back!) and *Sun* editor Dominic Mohan in the audience, he fired a warning shot at public bodies that were digitizing newspapers at UCL’s opening of its Centre for Digital Humanities. The BL, he claimed, had unfairly undermined the private sector's paid-for content, and generated commercial gain for a publicly funded body. Pay-wallville clearly isn’t going to take this lying down. There's an acute commercial - and political - struggle brewing here.

Two, something strange is happening in our culture – as the digital become more ubiquitous, its apparent opposite is showing signs of a come-back. The emergence of 'steam-punk' and 'valve-punk' in fiction and interior design, the return of vinyl in music, and lomography in still photography, all signal the resilience and continuing pull of the analogue in the digital age, in particular among the under-25s, the market-shapers of the future.

Three, technical issues surrounding the permanence of digital preservation remain, although more sustainable platforms and protocols are now being developed. A more pressing immediate concern is what then happens to the analogue copies. Will the conservation of some titles be privileged over others? How might that distort the historical record? Will it limit instead of enhancing public access? We remain also in a world of unequal access to bandwidth, where availability depends on place, proximity to functioning public libraries, gender, and the structure of domestic time. Equally

¹² Paul Mason, ‘The end of capitalism has begun’, *Guardian*, 17 July 2015, from Paul Mason, *Postcapitalism: A Guide to Our Future*, London: Allen Lane, 2015.

seriously, geo-political power and the available resources may mean that preference is given to the digitisation of English-language titles over other languages, which is why it's vital for other languages across the globe to be properly represented in the digital arena and to be studied in their own right, and in relation to each other.

And four, arguably right now the greatest danger is the continuation of the policy of austerity. Financial constraints threatens the capacity of many curators of periodical and other collections to continue to produce or make available digitised material at the growing rate we've seen over the past two decades, or even to make analogue materials publicly available in the way we've become used to for a generation. We can no longer assume that things will just keep getting better, as IFLA and UNESCO did in the late 1990s.

In conclusion, we can safely say that the digitisation of periodicals has provided researchers with powerful searching, analytical and preservation tools. However, they are not tools that we can employ in abstract, non-contextualised, de-historicised ways. On the contrary, they form parts of a social and historical process that requires our continued critical scrutiny. This is particularly pertinent for our sub-discipline as press historians since, unlike in some other areas of the humanities, we are also specialists in the analysis of communications networks. We are adept at crossing and connecting disparate formats, languages, ideologies, cities and nations, (the space 'between' the titles) and few of us, I suspect, work, or can work, exclusively in either analogue or digital. We need to put those cross-platform skills to work, and to regard the digitised periodical as a subject of study as well as a source of information or a means of conveniently short-circuiting the 'historical method' embedded in the research process.

So, one of the key tasks facing us now is to develop those more critical analytical tools that will enable researchers in the future to make the best possible uses of the digitised periodical. Those tools will be rooted in an understanding of the history of the digitisation process, which involves paying due attention to its motivational drivers, funding streams, skillsets, silences, and its emerging possibilities, for example of linked data, as well as its impact on other dimensions of the care and development of archival collections. And while the realization of Marx's imagined 'knowledge machine' may not be imminent, the idea of a 'public intellect' whose neural synapses are our digitised networks of communications, local, regional, national and international, is in many ways a really useful one to think with, and to which our skills as scholars of periodicals can bring some significant new readings.

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An earlier version of this paper was delivered as 'Beyond the fragments - researching the digitised Victorian newspaper', Keynote Lecture, Communities of Communication Conference II, University of Edinburgh/National Library of Scotland, 10 September 2015. I am grateful to Professor David Finkelstein, organiser of that conference, for permission to reproduce here certain sections of that keynote address.