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The Social Importance of the Preservation of Knowledge

On 10 May 1933, a bonfire was held on Unter den Linden, Berlin's most important thoroughfare, close to the Berlin State Library (Figure 1). It was a site of great symbolic resonance: opposite the university and adjacent to St Hedwig's Cathedral, the Berlin State Opera House, the Royal Palace and Karl Friedrich Schinkel's beautiful war memorial. Watched by a cheering crowd of almost forty thousand, a group of students ceremonially marched up to the bonfire carrying the bust of a Jewish intellectual, Magnus Hirschfeld, founder of the ground-breaking Institute of Sexual Sciences. Chanting the 'Feuersprüche', a series of fire incantations, they threw the bust on top of thousands of volumes from the institute's library, which had joined books by Jewish and other 'un-German' writers (gays and communists prominent among them) that had been seized from bookshops and libraries. Around the fire stood rows of young men in Nazi uniforms giving the Heil Hitler salute. The students were keen to curry favour with the new government and this book-burning was a carefully planned publicity stunt. In Berlin, Joseph Goebbels, Hitler's new minister of propaganda, gave a rousing speech that was widely reported around the world:

No to decadence and moral corruption! Yes to decency and morality in family and state! ... The future German man will not just be a man of books, but a man of character. It is to this end that we want to educate you ... You do well to commit to the flames the evil spirit of the past. This is a strong, great and symbolic deed.

Similar scenes went on in ninety other locations across the country that night. Although many libraries and archives in Germany were left untouched, the bonfires were a clear warning sign of the attack on knowledge about to be unleashed by the Nazi regime. That regime would move this act of destruction from the merely theatrical to the industrial scale and it has been estimated that over 100 million books were destroyed during the Holocaust in the twelve years from the period of Nazi dominance in Germany in 1933 up to the end of the Second World War.

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Fig. 1: Book burning on the Opera Square in Berlin on 10 May 1933. Bundesarchiv, image 102-14597. Photo: Georg Pahl, CC-BY-SA 3.0

But the staged book-burnings provoked a response among those who saw the need to defend the freedom of expression; in fact, two new libraries were formed as a counterblast. A year later, on 10 May 1934, the *Deutsche Freiheitsbibliothek* (German Freedom Library, also known as the German Library of Burned Books) was opened in Paris. Founded by German-Jewish writer Alfred Kantorowicz with support from other writers and intellectuals such as André Gide, Bertrand Russell and Heinrich Mann (the brother of Thomas Mann), the library grew rapidly, collecting over 20,000 volumes, not just the books which had been targeted for burning in Germany but also copies of key Nazi texts, in order to help understand the emerging regime. The writer H. G. Wells was happy to have his name associated with the new library which became a focus for German émigré intellectuals and organised readings, lectures and exhibitions, much to the disgust of German newspapers. Following the fall of Paris in 1940, the library was broken up, with many of the volumes joining the collections of the *Bibliothèque Nationale de France*. The Brooklyn Jewish Center in New York had established an American Library of Nazi-Banned Books in December 1934, with noted intellectuals on its advisory board including Albert Einstein and

Upton Sinclair, and was proclaimed as a means of preserving and promoting Jewish culture at a time of renewed oppression.

The 10 May 1933 book-burning was merely the forerunner of arguably the most concerted and well-resourced eradication of books in history through almost two decades of attacks on knowledge in libraries and archives, both private and institutional. These attacks on knowledge were a cultural and intellectual genocide that prefigured the human genocide that would soon follow. The Nazis, however, have not been alone over human history among authoritarian regimes in targeting knowledge – either through misinformation, destruction or theft. This is a phenomenon that continues to this day and in the digital age.

Destruction can take many forms, one of which is the assault on truth. A key trigger of this in recent times was the assertion in January 2017 by Kellyanne Conway, President Trump's Press Secretary, that against the evidence (publicly available facts) that fewer people attended Trump's inauguration than had attended President Obama's were 'alternate facts' that allowed an opposite view to be held.

The incidents of the destruction of knowledge also helps us see clearly the social importance of the preservation of knowledge. A paradigm example of this in recent times was the destruction of the landing records of the 'Windrush generation' by the UK Home Office in 2010, at the same time that the Home Office were instigating their immigration policy known as the 'hostile environment'. This policy targeted citizens from former British Empire and commonwealth countries who had been invited or allowed to come and work in the UK after the Second World War, but were being challenged to prove through documentation their right to remain. At least 80 of these men and women, many of whom had spent most of their lives in the UK, were unlawfully deported based on the fact that they lacked the documentary evidence to prove their right to remain, whereas in fact the Home Office all this time had possession of the landing cards that could prove their lawful status. This archive of documents was destroyed by the Home Office, an act open to two different interpretations – was it simply to create more space or was it to deprive those being targeted by the policy of documentation that might have been helpful? Attacks on knowledge have a long history. Examining that history tells us much about the crucial role of knowledge in a healthy, open society and the place of institutions – libraries and archives – that society has entrusted the role of preserving knowledge to.

The British Museum's wonderful exhibition in 2018, 'I Am Ashurbanipal', had a library at its heart – perhaps the earliest we know of that attempted to hold the entirety of recorded knowledge known at the time. It is the surviving library of Ashurbanipal, King of Assyria, dating from the seventh century BCE, and formed of clay tablets marked with cuneiform script. The library of Ashurbanipal is the best known of many libraries and archives that survive from the ancient civilisations of

Mesopotamia, institutions dating back five millennia that were also formed through acts of destruction and deliberate theft.

There are accession records for Ashurbanipal's library which have been studied by scholars working in this field which show that he was deliberately targeting libraries and archives in neighbouring states – especially Babylonia – by sending his agents either forcibly or through diplomacy to seize documents from these other libraries in order to build his own knowledge base up. Part of the content of these ancient libraries concerned predictions about the future, about astronomy, astrology and divination, a theme that recurs in the digital age.

If you are able to remove knowledge from your enemy you can not only make them weaker but also make yourself stronger. Our knowledge of these libraries and archives has emerged since the middle of the nineteenth century, when a series of excavations were begun by French archaeologists. A British explorer, Austin Henry Layard, who was deeply interested in antiquities, undertook ground-breaking excavations in the ancient capitals of Nimrud and Nineveh in what is now Iraq and brought tens of thousands of tablets, the contents of these ancient libraries and archives, back to the British Museum. He was known as 'the lion of Nineveh' and became famous and wealthy at the time.

One cannot discuss attacks on knowledge in the ancient world without making reference to the Great Library of Alexandria. For millennia, the greatest library in the ancient world has been assumed to have been destroyed in a catastrophic conflagration; the ancient writers were in fact divided on even the basic issues of the Library, including its size and the causes of its demise. All they really agreed on was that it was larger than any other library they knew of and that great scholars came to work there such as Euclid, the founder of modern mathematics who wrote the *Elements of Geometry* (Figure 2) while working at the great library. What modern scholars now agree on is that the library did not go up in flames in a single terrible event but declined slowly, over a long period of time, reduced to nothing through neglect and under-funding so that by the fourth century of the Christian era the library was completely gone, just a memory.

Moving forward in time, one of the most momentous periods for the destruction of knowledge was the Reformation of the sixteenth century. One person, John Leland, was instrumental in both destruction and preservation of knowledge in England at the time. He was an astonishing character who doesn't feature in Hilary Mantel's great trilogy about Thomas Cromwell and Henry VIII but really ought to have. Educated both at Cambridge and Oxford and then later at the University of Paris, he became steeped in humanism and very interested in investigating primary sources of the past. Henry VIII tasked him with a 'most gracious commission, to peruse and most diligently search all the libraries' of the monasteries and colleges in the country as part of the King's so-called 'Great Matter', the search for informa-

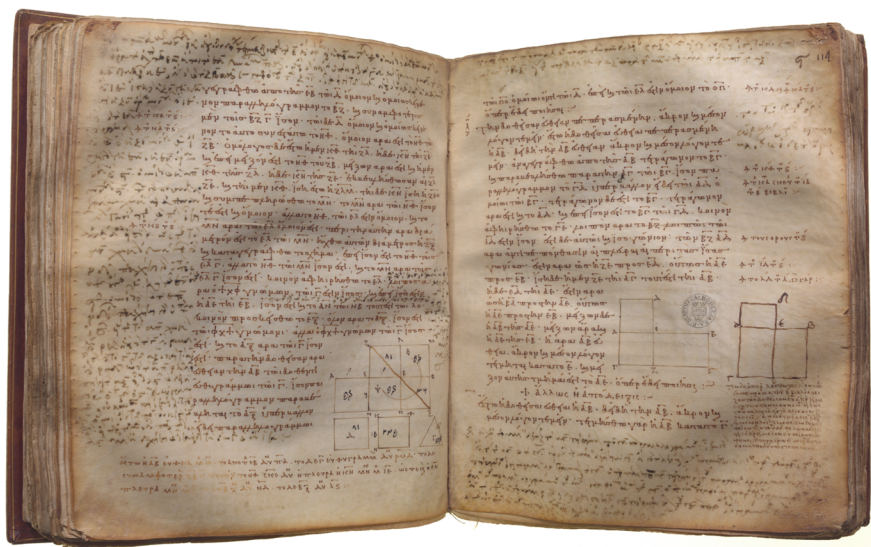


Fig. 2: Euclid, *Elements*, Constantinople, CE 888. Bodleian Library, MS. D'Orville 301, fols. 113v–114r. Photo: Bodleian Libraries, University of Oxford, CC-BY-NC 4.0

tion to help him win his case for the divorce of Catherine of Aragon, to enable him to marry Anne Boleyn and later to argue for the divorce of the whole country from Papal authority.

We are fortunate in the Bodleian Libraries to have the archive of John Leland. In these papers one can find maps of his journeys, the so-called itineraries. These are extraordinary documents listing the places he visited, sometimes with maps that he drew to help plan the journeys containing detailed notes of the books that he saw. Leland's archive provides an extraordinary snapshot of the medieval libraries of Britain on the eve of the Reformation even though he didn't realise that through his research visits he was party to their destruction.

In 1533, Leland visited Glastonbury Abbey. In size it was actually bigger even than Canterbury Cathedral and it was of course a great pilgrimage site with associations to the mythical King Arthur, to Merlin and to Joseph of Arimathea. It thus attracted great wealth such as through many donations from pious pilgrims and also built up an extraordinary library. It was one of the libraries that Leland was most excited to go to visit.

Leland actually gives us a description of his visit to the library in 1533 or 1534. 'I had hardly crossed the threshold' he wrote, 'when the mere sight of the most ancient books left me awestruck, stupefied'. He literally swooned just at the mere sight of the ancient books in the library and he became great friends with the

elderly Richard Whiting, the last Abbot of Glastonbury. He recalls in his notes how generous Whiting was in showing him books and giving him hospitality in his visit and he even left us notes of the books that he looked at. Some of them were ancient chronicles which were to help prove that there was a viable Church in England before the Norman Conquest, indicating the antiquity of an alternative to Papal authority. He also found there many sources which helped him unearth the history of King Arthur, such as a book there which he was greatly interested in. It is documented in a list of the books he saw in 1533 and reads: ‘grammatica Euticis liber olim Sancti Dunstani’. It is now known as *Saint Dunstan’s Class Book* (Figure 3) and is a miscellany of texts dating from the ninth to the tenth century, three of which were almost certainly owned or used by St Dunstan, Abbot of Glastonbury, and then later Archbishop of Canterbury, a very important figure in the reform and modernization of the Church in England in the ninth century.

What happened next was absolutely tragic for the library of Glastonbury Abbey. In 1539, the Act for the Suppression of the Greater Monasteries was passed which set up a series of visitations by commissioners appointed by the King to pursue the task of dissolution. The commissioners visited Glastonbury Abbey where they presented trumped-up charges against Abbott Whiting that he ‘robbed the Church of Glastonbury of treasure’. He was duly tried, convicted and sentenced to death. He was then dragged through the town and taken up to Glastonbury Tor, the famous hill behind the Abbey, where he was hung, drawn and quartered, with parts of his body placed in neighbouring towns: Wells, Taunton and Glastonbury itself. The monastery itself was then dismantled and the books either destroyed or dispersed.

We don’t know exactly how many books were in the library between 1533 and 1534 when Leland visited, but the medieval catalogue of 1249 allows us to estimate that there were at least 1,500–2,000, with a mere sixty volumes known to survive today. A similar fate befell the other medieval religious libraries of Britain, none of whom escaped the Reformation intact. What happened to the books? From contemporary accounts we know that many of them were torn up and sold, some were bought by grocers and soap sellers according to Leland’s friend John Bale and some were sold to book binders to strengthen bookbindings. These volumes ceased to have value other than as waste material and it is therefore remarkable that we have even a small number of books from the medieval library at Glastonbury (as well as from other medieval libraries). Those that have survived are with us now thanks to the activities of antiquaries and many of these antiquaries became part of a reaction against the destruction of knowledge during the Reformation.

A similar fate befell the books in the library of my own institution, the University Library in Oxford. Originally founded in 1320 by Thomas Cobham, Bishop of Worcester, in a room in the University Church specially constructed for the purpose of a library, it grew during the middle ages through numerous gifts, espe-



Fig. 3: *St Dunstan's Classbook*. Bodleian Library MS. Auct. F. 4. 32, fol. 1r. Photo: Bodleian Libraries, University of Oxford, CC-BY-NC 4.0

cially a spectacular one in the middle of the fifteenth century from Humfrey, Duke of Gloucester, one of the most powerful laymen in the country, someone deeply interested in humanistic learning. In order to make room for almost 300 new books from Duke Humfrey's gift, the University authorities built a new library – a beautiful space, still called Duke Humfrey's Library today – which first opened to readers in 1488. But this library was destroyed in the second phase of the Protestant Reformation by the commissioners of Edward VI in 1549–1550. Again, the books were mostly sold for scrap materials and only a handful escaped with Catholics fleeing to Continental Europe.

What followed was a reaction against this wholesale and ideologically driven destruction of knowledge. Sir Thomas Bodley, from a staunchly Protestant family, an



Fig. 4: John James Halls, *Rear Admiral Sir George Cockburn at the burning of Washington*, ca. 1817, oil on canvas, 239 × 148.5 cm. National Maritime Museum in Greenwich, London. Photo: Public Domain

Oxford graduate, someone who had considerable private wealth and who was well connected in the Court of Elizabeth I, came along in the 1590s and set about re-establishing the library. His refounding of the library had significant special features, with the founding statutes of the library placing preservation absolutely at the heart of the library's mission, as well as access. Making knowledge available to what Sir Thomas called 'the whole republic of the learned' was key – the library was one of the few open to scholars from outside the University and the Bodleian published a catalogue of its holdings as early as 1605. Bodley, moreover, directed all of his funding, his own wealth, to endow the library to provide for 'officer's stipends, the augmentation of books and other pertinent occasions'. He wanted his institution to endure and not to suffer, as he had seen the fate of so many libraries during the Reformation.

The nineteenth century saw another episode of the destruction of knowledge, the burning of the Library of Congress in 1814 (Figure 4). This was the result of a military intervention led by Rear Admiral Sir George Cockburn who led a British expeditionary force to the United States, a part of the war of 1812–1814.

There is an eye-witness account of the burning of Washington by George Gleig who wrote: 'I do not recollect to see more striking or sublime than the burning of Washington'. He also was rather ashamed that the troops of which he was one also set fire to 'a noble library, several printing offices and all the national archives which were committed to the flames, which might better have been spared', so he later admitted.

The library, the only one in the city, was housed in the Capitol building, the only stone building in the city at the time, which housed the Senate and the House of Representatives as well as the office of the President. The Library of Congress had been founded in 1800, the first librarian appointed a few years later and the collections had been slowly built up to the point in 1814 that the 5,000 or so volumes provided a very useful set of combustible materials to start the fire. One of the books from the building was saved – not from the Library of Congress but from the office of the President – and taken as a souvenir by one of the British troops who regarded it as the 'spoil of the conqueror' and gave it to Cockburn. It was eventually restored to the Library of Congress by A. S. W. Rosenbach, the great rare book dealer, in 1940.

What happened after the events of August 1814 was another response to destruction and a further indication of that human impulse for preservation and renewal. That response came from Thomas Jefferson, one of the founding fathers of the United States and a former president, who had retired to his estate at Monticello in Virginia where he heard about the fire and wrote an absolutely scorching letter to a national newspaper in Washington saying that this was an act of barbarism and he offered his own library, the greatest private book collection in the United States at the time, to be purchased by Congress at favourable rates to replace the lost library. After months of political wrangling, Congress eventually agreed to the purchase and Jefferson ended up selling six and a half thousand volumes for the princely sum of twenty-four thousand dollars; quite an enormous sum at the time but which gave the new Library of Congress a head start, with vital books for government to use to help it manage its national affairs. Unfortunately, this library then suffered another accidental fire in 1851, the result of which was that Congress voted for much bigger funds to rebuild the Library of Congress and make it the great institution that it is today. However, the burning of the library remained an important part of the national myth of the United States long into the nineteenth century.

Almost exactly a century on from the destruction of the Library of Congress there was another noteworthy attack on knowledge which became an international incident in the way that the burning of the Library of Congress really didn't: the destruction of the Library of the Catholic University of Louvain in August 1914. Soon after the start of the First World War, the German army marched into neutral Belgium where they occupied the beautiful, ancient city of Louvain (modern day Leuven), which many called the 'Oxford of Flanders' because of its combination

of attractive ancient architecture and the famous University. In August 1914, the German troops set fire to the historic centre of the city and indeed started it in the university library which was quickly destroyed, with almost all the collections incinerated. The University library dated back as an institution to the 1630s and was refounded in 1835, becoming one of a number of legal deposit libraries for the (then) new country of Belgium. The attack on knowledge that the burning of the library represented prompted an international outrage; all over the world the news of the burning of the library was met with dismay and horror.

Although this episode in the First World War has for the most part been forgotten today, at the time it was a huge story. The burning of the library was viewed as a crime against the world and the destruction of the Library of Alexandria was evoked to give a sense of the scale of the loss, however, one of the interesting things about this story was the reaction to the great conflagration. An international movement to raise funds and to donate books to give to the library was begun, with a special clause in the Treaty of Versailles written whereby Germany was charged with replacing the destroyed books. The Americans took the library's renewal as an opportunity for projecting soft power in Europe after the First World War, with a committee charged with raising the funds necessary to rebuild the physical structure of the library, chaired by Nicholas Murray Butler, the President of Columbia University.

Butler's committee chose an American architectural practice, Warren and Wetmore, to design the new library, and they designed a pastiche or facsimile of the original building in the Low Countries vernacular style. A motto soon became associated with the promised building: 'Destroyed by the Germans in 1914. Restored by America in 1922'. Despite the ambition, it took Butler's committee much longer to raise the money than they had originally planned, with John D. Rockefeller eventually supplying the shortfall himself. By the time that they finished raising the money, in the late 1920s, the post-war diplomacy between Belgium and Germany had begun to see a burying of the hatchet, so to speak, and the acts in Louvain in 1914 began to be purposefully ignored or downplayed by Belgians.

The Americans intended a grand opening ceremony for the rebuilt library with a massive plaque laying out the motto in Latin, that the building was destroyed by the Germans and rebuilt by the Americans, which became a national point of tension. The American architect put this plaque up several times and local Belgians climbed up in the middle of the night and smashed the plaque because they didn't want it to colour the relations that they had with their neighbours. Eventually the plaque was removed and placed in a war memorial and the library was finished: rebuilt and modernised.

The Louvain Library was incredibly important to Belgium as a kind of national symbol – a place of culture but also a place of learning by the young, an institution,

therefore, dedicated to the future. There was a great effort to rebuild the library and to restock it with books, an international effort that was supported by libraries and readers all over the world as well as by librarians – the national campaign in Britain was led by Henry Guppy, the librarian of the John Rylands Library in Manchester. Sadly, however, in 1940 the library was destroyed a second time, again by the German army, who targeted it with artillery fire. The library was rebuilt after the Second World War, once again.

The Holocaust was one of the episodes in history where the greatest amount of destruction of knowledge took place. Vilna, or modern day Vilnius, in Lithuania at the beginning of the twentieth century was one of the great centres of Jewish civilization in Eastern Europe: a city full of libraries, archives and learned Rabbis. The Strashun Library, for example, had been formed by a bibliophilic Jewish businessman at the end of the nineteenth century, and left to the Jewish community in Vilna. On the eve of the Second World War, it had a busy reading room and a learned librarian (Figure 5), but Vilna also had a great archival institution, a research institute into Yiddish culture, into the cultural life of everyday Judaism in Central and Eastern Europe, called YIVO. YIVO from its foundation in 1922 began to collect materials that documented everyday life of the Jewish communities in central and Eastern Europe: oral histories, music hall posters, documents such as medical case notes and even the diaries of Theodor Herzl, the founder of Zionism. In 1939 Poland, Lithuania and the other Baltic States were divided between Germany and Russia; then, in 1942, the Germans invaded and occupied Vilna, seizing the Jewish library and archive collections in the city.

Just behind the Blitzkrieg came an operational group, established and run by a librarian, Johannes Pohl. The group, called the Einsatzstab Reichsleiter Rosenberg, was tasked with identifying books and documents from the seized Jewish libraries and archives which were to be sent back to Frankfurt to the 'Institute for the study of the Jewish question' established by Alfred Rosenberg, the chief strategist of Anti-Semitism in Nazi Germany. What was not chosen to be sent to Frankfurt would be sent to local paper mills for destruction.

The Nazis forced the Jewish community of Vilna to live in the ghetto, and they identified a number of former librarians and archivists and other intellectuals to undertake the horrible task at gunpoint of sorting through these seized libraries and archives. Such a task must have been incredibly difficult with their own history and culture either being sent to Germany or to be destroyed. The Jews who were selected for this task became known as the 'Paper Brigade'.

The human impulse toward preservation can be identified in the actions of the 'Paper Brigade' (Figure 6). They smuggled items from the collections they were forced to sort through back into the ghetto every day and they hid these books and documents inside the ghetto itself in the hope that one day they could be recov-



Fig. 5: Khaykl Lunski in the Strashun Library in Vilnius, 1930. Center for Jewish History Digital Collections: YIVO, via Europeana. Photo: Public Domain



Fig. 6: Three members of the 'Paper Brigade' pose together on a balcony in the Vilna ghetto. United States Holocaust Memorial Museum Photo Archives #64900. Courtesy of the Sutzkever Family. Copyright of United States Holocaust Memorial Museum

ered. Each time they did this they risked their own lives, displaying a compulsion to preserve their own culture, their own documentary witness to their community, to their civilisation, in the hope that they would survive the Holocaust and the documents could speak of the lives they had before the war.

A few of the members of the 'Paper Brigade' managed to escape when the Vilna ghetto was liquidated in 1944 and joined Partisans in the forests. With the Soviet army they liberated Vilna and retrieved some of the collections – tens of thousands of documents that they had managed to hide.

This effort to preserve the documentary heritage – witnesses of Jewish life – did not just happen in Vilna; it was undertaken in other centres in Eastern Europe as well. In the Warsaw ghetto an archive was made by an organisation called 'Oyneg Shabes', led by an extraordinary man called Emanuel Ringelblum who was murdered when the Warsaw Ghetto was liquidated, but only after he had managed to hide and bury documents which he and his fellow members had saved. These were dug up afterwards in metal cartons and milk canisters (Figure 7).

Some of the documents which had found their way from Vilna to Rosenberg's Institute in Frankfurt were seized by American forces in 1945 and eventually sent



Fig. 7: One of the milk cans used to hide documents. From the Ringelblum 'Oyneg Shabbos' Archive. Photo: Public Domain

back to a branch of the YIVO Institute in New York in 1947. Meanwhile, back in Vilna, the materials that had been saved by the 'Paper Brigade' and then sent for destruction again by the Soviets were saved a further time, this time by a Lithuanian librarian called Antanas Ulpis who preserved these documents by going to the paper mills and turning the trucks around and driving one of them back himself. He hid them in a church that had been requisitioned as one of the storage sites for the new National Library of Lithuania and also hid the documents in organ pipes in other locations; they were only revealed after Ulpis's death in 1989 as the iron curtain came down. They are now one of the great treasures of the National Library of Lithuania and are being digitised by the YIVO Institute in New York.

The attacks on knowledge in Bosnia and Kosovo during the Balkan conflicts following the break-up of the former Yugoslavia is another example of a cultural genocide that came before a human genocide.

The National Library of Bosnia and Herzegovina in Sarajevo was deliberately attacked by the Serb militia besieging the city with incendiary shells; no other buildings were targeted on that day, 25 August 1992. The fire brigade and librarians that tried to rescue collections from the burning building were shot at by snipers, but if you look at the western newspapers at the time you will find that the attack on the library didn't even get onto the front pages. The story was buried inside with very brief accounts, much briefer than stories about the last bear in the Sarajevo Zoo. The library was attacked because it was a living institutional symbol of the multicultural community that Sarajevo and Bosnia had managed to create in the decades before the wars. It preserved the written culture of Bosnian Muslims, Jews and Christians all living more or less happily together, something which the Serbs deliberately sought to attack through eradicating the Bosnian national memory – the library.

It wasn't just the National Library that was targeted at the time. Provincial archives and land registries were also destroyed by Serbian forces trying to eliminate any record of Muslim land ownership.

A librarian called András Riedlmayer, who has just retired from the Fine Art Library in Harvard, collected evidence for the International War Crimes Tribunal for the Former Yugoslavia as to what had happened to libraries and archives in Bosnia. He even gave evidence at the trial of Slobodan Milošević and for other war criminals like Ratko Mladić. Part of his testimony concerned the cultural importance of the National Library and also the lengths that the Serbs went to in order to destroy the knowledge that it contained.

At this moment in time, we are experiencing a profound shift in the way that knowledge is created, shared and stored. As a society we are outsourcing the storage of social memory to the big technology companies, what the great Oxford historian Timothy Garton Ash calls the 'private superpowers'. What these companies advertise as free services aren't really free – we contribute our usage data, which is then harvested and mined for targeted commercial purposes. We also are seeing an increasing number of incidents of that 'free' storage being terminated as business models are reviewed and people lose access to collections which had been placed there. And of course there are hostile attacks too, where cyber warfare is happening.

The preservation of knowledge is one of the pillars, I would argue, of an open society. But our reliance on the web as a platform for sharing knowledge and even for storing it is very dangerous. We can see this when the Harvard Law Library did a survey a few years ago on the decisions of the Supreme Court in the United States

through the website where all these decisions are now published and found in 2011 that 40% of the links on that website were broken and didn't lead you to anywhere. Access to the laws of the land are of fundamental importance to an open society.

Then in more recent times we've seen the data profiling company Cambridge Analytica actually using the information that we all create every time that we search on a user search engine, use social media services such as Facebook, click 'like' on posts and so on, using it to create digital profiles of us which are traded every day to sell for influencing political agendas. The data harvested and profiled was used to target political advertising through Facebook.

One of the problems faced by society at the moment is that the tech companies do not have preservation in their business model. There is no Facebook archive (for example): we do not know what the political adverts contained that were targeted at Facebook users during the 2016 Presidential elections, for instance. Some libraries and archives are now developing strategies, however, to circumvent this. The National Library of New Zealand for example has a project where they are asking New Zealanders to donate their Facebook profiles in order to gain a picture of how New Zealand society interacted with social media in the twenty-first century.

To give a further indication of the dangers that society faces with the tech industry we should return to the obsession of Mesopotamian civilisations with the prediction of the future. This is what the modern data-driven tech industry is now heavily concerned with – and began with the ad-tech industry trying to predict an individual's future spending habits through profiling their online behaviours. It then moved onto voting intentions and is now focussed on predicting future health through wearable devices such as a Fitbit or Apple watch to track your Digital health, when this data is actually sending information about your health to the private tech companies. The devices and the data they gather can be used by an individual to monitor your vital health statistics but is now being harvested and gathered by those companies to help them predict your future health. Google, for example, has acquired Fitbit, so they can easily match your search history – if you googled the symptoms of heart disease, Google can now match this with your biometric data from your Fitbit. How would you feel if Google sold this information to your health insurer?

It is also possible to see the power of the tech industry to suppress information that might be important for society to understand our contemporary world. In January 2021 a group of insurgents inspired by Donald Trump stormed the US Capitol building in Washington where tragically five people lost their lives that day. We know that they used an encrypted messaging App called Parler to communicate and organise which was quickly taken down from the App stores and from the web. However, a not-for-profit library service called the Internet Archive preserved the Parler Website just before it disappeared so there is a record of it.

Of course, Donald Trump was the first president to use social media to control political communications and he did so incredibly successfully. But he also had a habit of deleting many messages shortly after sending them, which while not a high percentage is still of great significance given how much he relied on Twitter as a platform. Several activist archivist groups set up systems to automatically screenshot each Tweet from Trump and to make them publicly available as a complete record of his social media behaviour. The National Archives of the United States are now using this data on their own Presidential Library site for Trump.

The use of encrypted and self-deleting messaging systems is something I am now very concerned about, as they hide the communication between Government ministers, civil servants and special advisors on matters of great public concern, especially in the formulation of government policy. The public has a right to know the content of these messages if they relate to the business of government. And as such it is my view that they should be handled under the 1958 Public Records Act, as I have argued elsewhere, and the Ministerial Code of Practice needs to be strengthened and parliamentary sanction given greater teeth to ensure we know what our paid officials are doing.

Throughout history, knowledge held by libraries and archives have been targeted for attacks and for religious, political, cultural and ideological motives. The fact that libraries and archives continue to be subjected to hostile action by those seeking to impose authoritarian control on society is a measure of the importance of the work they do. Libraries and archives are nothing less than the infrastructure of democracy and there are five functions that these institutions perform for society that demonstrate this role: firstly, they provide opportunities for education at all levels and for all ages, perhaps the most enduring function of a library, as well as for self-education where – in the case of public libraries – access to knowledge is free for all. Secondly, they provide a diversity of knowledge for society. As John Stuart Mill wrote in *On Liberty*: ‘Only through a diversity of opinion is there, in the existing state of human intellect, a chance of fair play to both sides of the truth’. Libraries especially bring a great diversity of ideas, of knowledge, from different languages to different and often challenging ideas into a community or into society. Thirdly, libraries and archives, and perhaps especially archives, are repositories for the rights of citizens, whether that means the laws of the land or, in the case of land registries, the conformation of property ownership, or in the case of population registries, the facts of citizenship. Fourthly, libraries and archives are, in the world of misinformation and disinformation, reference points for facts and truth where knowledge is preserved, properly provenanced and catalogued and where it is open to the public for verification. Finally, libraries and archives are places where the identities of communities and of society are preserved and made accessible.

As we see in Ukraine at the moment, libraries and archives are the lifeblood of an open, democratic society; Russian attacks on libraries in occupied parts of Ukraine show how much they challenge the authoritarian instinct. We must learn the lessons of the past if we are to support society moving into the future and invest in the preservation of knowledge.