

Introduction: Magic books

There was once a very learned man in the north-country who knew all the languages under the sun, and who was acquainted with all the mysteries of creation. He had one big book bound in black calf and clasped with iron, and with iron corners, and chained to a table which was made fast to the floor; and when he read out of this book, he unlocked it with an iron key, and none but he read from it, for it contained all the secrets of the spiritual world.

This is the opening to the folktale ‘The Master and his Pupil’, first printed in English at the end of the nineteenth century but circulating long before. Even though you probably haven’t read it, it may well seem familiar (that’s pretty much the definition of a folktale). And when you read the start of the next paragraph – ‘Now the master had a pupil who was but a foolish lad’ – it is probably clear already what will happen. This is a version of the sorcerer’s apprentice tale, and the pupil will take his place in a line of hapless book handlers from Victor Frankenstein to Harry Potter. Like them, he will stumble

into, read aloud inadvertently from or otherwise mishandle this magic book, with terrible consequences.

Sure enough, the boy opens the book, which has been left unlocked by the master. As he reads from its red-and-black printed pages, there is a clap of thunder. The room darkens. Before him there appears ‘a horrible, horrible form, breathing fire and with eyes like burning lamps. It was the demon Beelzebub, whom he had called up to serve him’. Asked by this terrifying apparition to set him to a task, the pupil panics. In a strangely domestic moment, he asks the demon to water a potted geranium. The demon complies, but he repeats the action over and over, until the house is awash, ‘and would have drowned all Yorkshire’. The master returns in the nick of time, to speak the countercharm that sends the demon back into the pages of the book.

In the massive compendium of folklore motifs compiled by the American folklorist Stith Thompson in the early twentieth century, this story-type is traced across various European languages. Categorized as D, ‘Magic’: subsection 1421.1.3: ‘magic book summons genie’, its exemplars across many centuries range from Icelandic to Lithuanian traditions. Each of these iterations shares an outline. A magical or powerful book is kept under the control of a learned man – a minister, magician or scholar. While he is temporarily absent, some unskilled person in his household – a child, servant or friend – finds the book and accidentally summons a devil.

The story captures a widespread fear that books are

powerful and dangerous in the wrong hands. What makes the master the master, and the pupil the pupil, is their ept or inept use of the book: it is the object that secures their relative positions. It is an active agent of social differentiation, conferring status upon its handler. This is absolutely not a parable of books as democratic objects, available to all. Once the pupil can manipulate the book of knowledge effectively, he will become the master. But this is exactly what makes the book a potential disruptor of social hierarchies.

Anxieties about books' disruptive power had begun to intensify in the sixteenth century: in one early version of the story, performed for a culture newly enamoured of the products of mechanical printing, an intellectually restless scholar uses them as go-betweens in his conversation with devils, swapping infernal knowledge for an immortal soul. In this, Christopher Marlowe's *Dr Faustus* departed from its predecessors in German folklore: the original Faustian pact traded directly with the devil. But Marlowe was speaking to the Renaissance world of knowledge created by the printing press, which had made books more present, more prevalent and more liable to fall into the wrong hands (that Faust, or Fust, was also the name of Johannes Gutenberg's business partner in his print shop may be a coincidence, but it is a delicious one).

The sense of books' shadowy magic continued to accrue force as the printing press compounded its cultural dominance. Glossing "The Master and His Pupil"

in his 1890 compilation of *English Fairy Tales*, folklorist Joseph Jacobs suggests that the magician's spell has 'long been used for raising the——': his omission of the word 'devil' reveals that he, like the learned man in the North Country, is invested in the power of the printed word. Jacobs's book, which was also responsible for popularizing such familiar stories as Tom Thumb, Dick Whittington, the Three Little Pigs and Jack and the Beanstalk, is implied to possess the power of the sorcerer's book of magic: the reader is advised 'not [to] read the lines out when alone', since 'one never knows what may happen'.

In a tale told with pared-down simplicity, the detail of the book's description in 'The Master and His Pupil' is striking: we know more about what it looks like than either of the human protagonists, who are scarcely characterized at all. That's because the book is at the centre of the story. While its contents are only implied, its outward appearance visualizes its magical powers. Originally, the book features described had a practical purpose, but by the time of the story they had come to connote antique and powerful learning. For example, when books were stored flat rather than upright, as was common practice until the late seventeenth century, their corners needed protection. Metal corner-pieces were thus first practical, and later decorative, aspects of bookbinding. Metal clasps also initially had a practical purpose, preventing pages made from vellum – calfskin – from curling or buckling in damp conditions. Later, when they were

no longer needed, because paper leaves were less susceptible to their environment, clasps were nevertheless retained on some volumes to symbolize the important, precious or secret content between the book's covers. Buy a modern tween a physical diary, for example, and that book may well include a lockable plastic clasp in retro imitation, conferring a heightened sense of privacy on their adolescent confessions.

A clasped book also demanded a certain physical ceremony. Writing in the early fourteenth century, explaining and defending his own ruinously expensive book habit, Richard de Bury admonished careless handling of books: 'In the first place as to the opening and closing of books, let there be due moderation, that they be not unclasped in precipitate haste, nor when we have finished our inspection be put away without being duly closed.' Opening and closing the clasp was part of a ritual of respect for the book and its contents, a ritual that should be afforded proper care and time. The medievalish leather-bound volume with metal clasps described in the story thus has a range of visual connotations, with magic, with scripture and ritual, and with storytelling itself.

In the story, the master is culpable because he left the book unclasped, leaving its esoteric secrets open to the unworthy. And attached to a table, his book evokes the history of chaining valuable books in university and cathedral libraries in the Middle Ages and well beyond (the Bodleian Library in Oxford stopped chaining books

in 1769; the last Oxford college unchained theirs in 1799). All these features combine to create a venerable, occult and valuable book: part Bible, part grimoire, or book of spells. Archetypal and potent, these books look and behave in particular ways. They are large and leather-bound. They are written in Latin, or in other unfamiliar languages or scripts. They are old. And they are actively powerful, especially in the wrong hands.

This darker aspect of books' efficacy has persisted in the numerous reiterations of this story into the modern era. In Disney's 1940 version of the story, retold as the most popular of the animated episodes in *Fantasia*, the the sorcerer, complete with long beard and fearsome eyebrows, was allegedly modelled on Walt himself. Wearing a long robe and a pointed hat with astrological symbols, he conjures his spirits from a volume open on his magic desk-altar. Amid the flood caused by his usurpation of these magical powers, Mickey Mouse scrabbles onto this floating book. Surfing the waters aboard the book, he desperately leafs through its pages, looking for the magic antidote. Here, 'The Sorcerer's Apprentice' resonates with its own period, and with a contemporary Hollywood transformed aesthetically and culturally by Jewish émigrés from Europe, including the talented abstract animator on *Fantasia*, Oskar Fischinger. The horrifying image of the multiplying broomsticks marching in fascist lockstep, their nightmarish shadows cast menacingly on the wall, echoes the topical iconography of Nazi military power. The apprentice has summoned

forth a cinematic sequence from Leni Riefenstahl. The powerfully dangerous sorcerer's book thus resonates with another necromantic volume, *Mein Kampf*, and its dark arts of national resurgence and racial purity (see Chapter 11).

I've begun with the tale of 'The Master and His Pupil' for two reasons. The first is a sentimental attachment to this parable of dangerous and transformative bookishness firmly, if unexpectedly, located in Yorkshire, the 'north-country'. I was born and brought up in Leeds, West Yorkshire, and took my own first, inexperienced forays into the world of books at Bramley library, a pleasure-dome unpromisingly concealed within a single-storey 1920s brick building in a grimy post-industrial suburb. I can remember the scruffy parquet floor, the low stands of picture books and the child-sized chairs. My library tactic was a kind of reading triage, quickly assessing which books might be consumed there and then, reserving the precious places on my library card for stories that I could savour during the week. For me, as for many people, it was the public lending library that taught me about books as objects, as well as about fantastic worlds (see Chapter 9).

But the second reason is more significant. The story of 'The Master and His Pupil' establishes the central premise of my argument here, because it makes clear that it is the book itself, as much as its contents, that has agency. It's the book that summons the demon, not its clumsy reader. It functions as a material talisman rather

than a simple repository for magical information. The case I want to make over the course of this book is that what's superficially evident in the depiction and understanding of books of spells is actually true of all books. All books are magic. All books have agency and power in the real world, the power to summon demons and to despatch them. They are, as Stephen King puts it in his terrific memoir *On Writing*, from which I have taken my title, 'a uniquely portable magic'. And a book's magic always inheres in its form, including that portability, as much as in its content.

A thick paperback with block lettering, or a number of small, neat volumes, or a landscape format book – these would not work in Joseph Jacobs's story, because their forms conjure other sorts of content than spells. Just as it is vital that the magic book in the fairy tale has a black leather binding with iron furniture, so the apparently incidental forms that our own books take are inseparable from their meanings. And they too are talismanic, even if they don't have obviously special finishes. We tend to understand our engagement with books in emotional or cognitive terms, rather than in tactile or sensory ones. We emphasize the encounter with the book's contents rather than the feel of it in our hands, the rustle of its pages, the smell of its binding. But if you think about the books that have been important to you, it may well be that their content is inseparable from the form in which you encountered them.

My much-loved childhood Gerald Durrell, especially

his animal-collecting, documented in the fascinating *Bafut Beagles* and *A Zoo in My Luggage*, for example, will always be in the yellowish wrappers of World Books. This was the mail-order book club from which my unbookish grandparents bought most of their small library in the 1950s. These hardback volumes in their faded dust jackets seem somehow connected to the dry savannahs and pith-helmet world of Durrell's colonial expeditions captured within them. I was in awe of my copy of Jan Pieńkowski's wonderful piece of pop-up book architecture, *Haunted House*, forever reminded that its spooky slide transitions, tabs and flaps were fragile and always therefore feeling myself too clumsy to ever enjoy its cheerfully ghoulish fairground aesthetic. The edition of Thomas Hardy's *Tess of the d'Urbervilles* we had at school was most remarkable for its transparent cover film that called irresistibly to be peeled back, leaving behind a washed-out still of Nastassja Kinski wearing a straw hat from Roman Polanski's 1979 film: later, weakened by these depredations, I think my copy had to be backed in wallpaper left over from our spare bedroom. My *Tess* is part ghostly reproduction, part blue sprig on a cream background. It is a specific physical edition that thus triggers a quite different reading experience from other versions, such as Hardy's weekly serial, originally published in illustrated newspaper *The Graphic* in 1891; or the novel released in three volumes that year; or the single volume that followed the year later; or the beautiful collectors' copy bound in purple cloth and illustrated

with contemporary woodcuts now available from an upmarket publisher; or the large-format student annotation edition, with extra-wide line spacing and margins for notes and explanatory commentary in preparation for exams.

These editions and copies may all reproduce the same story (although Hardy substantially edited the serial version for the novel), but they are not the same book and thus not the same encounter: we read them differently. Form matters. Form captures a book's historical and cultural moment; form has its own politics and ideology; we read form almost unconsciously as an aggregate of the senses before, and alongside, reading the words on the page.

Portable Magic, then, is a book about books, rather than words. Words can be reissued in numerous forms and are subject to redefinition by those forms; books are stubbornly, irreducibly present. David Scott Kastan calls this distinction the difference between writing as 'platonic', or essential, and books as 'pragmatic', or contingent. It is this materiality that is our focus here. *Portable Magic* is not a study of platonic writing but a book about pragmatic books. Literary works don't exist in some ideal and immaterial state: they are made of paper and leather and labour and handling. I want us to explore and celebrate this material heft, and the wonderful under-sung inseparability of book form and book content. And not just in the hallowed halls of libraries and collectors, where histories of the book have tended

to hang out (although there too): the books here are everyday rather than aristocratic, mass market and marked with a coffee ring rather than unique and kept in a glass case. Still, form works its magic on them all. The saucy cover of Jilly Cooper's blockbuster *Riders*, for instance, with its gold lettering, curvaceous jodhpured bottom and opulent fan of pages, perfectly establishes its tone and presents its bulk as a pleasurable wodge of leisure time. In the eighth century, the early Christian missionary St Boniface requested from a monastery a copy of the epistles of St Peter lettered in gold so that he might present the new religion to wealthy 'carnal' men in the Frankish empire in the terms of temporal value that they would understand. The first issues of Dickens's novel *Bleak House*, serialized in nineteen blue-green paper-covered instalments in 1852–3, were framed by pages of advertisements. Perhaps the Siphonia pocket raincoat, available from the manufacturers Edmiston's, close by the Adelphi Theatre, was intended as a practical antidote to the 'soft black drizzle' and fog which memorably envelops London at the opening of *Bleak House*: one effect of these commercials is to align the novel's appeal with consumer rather than literary culture. What the thick bonkbuster, the luxury scriptures and the consumerist serial share is the material combination of form and content that I want to call 'bookhood'.

'Bookhood' is a nineteenth-century coinage on the model of more familiar forms such as 'childhood' or 'brotherhood', and one due for revival. It suggests the

book's physical autonomy and life-ishness: 'the state or condition of being a book', as the *Oxford English Dictionary* puts it. I like it because it encourages us to think about books from the perspective of the book itself, and because it helps focus attention on its physical engagement with the senses beyond sight, and with activities beyond reading. Bookhood includes the impact of touch, smell and hearing on the experience of books. It focuses on paper, on binding, on cover illustrations, on bookselling, libraries and collections. It explores how size creates meaning and shapes expectations. It registers the particular bodily gestures and vocabulary that we all use with books: long before we learned to swipe or pinch screens, we had to learn to thumb pages. Bookhood is a dog-eared page corner, or spines arranged on a shelf. We acknowledge it when we prefer a stitched binding to one of those glued ones from which the leaves inevitably drift, when we buy a collectors' edition or track down the specific cover of a childhood favourite in a second-hand bookshop, or when we recall, imprinted photographically in our memory, an illustration, or that a particular relevant phrase or reference was on the left-hand page about two thirds of the way down. Bookhood is remembering the smell and feel of a loved story, not just its plot or characters. Instead of making the book somehow transparent, simply a technological means to deliver its words, bookhood renders the book object more opaque, more present, more material. 'In normal reading,' writes Garrett Stewart, in a book about

books made into art objects, ‘books are to some degree vaporised by attention.’ Away with this normal reading! *Portable Magic* challenges this immateriality, reminding us instead that our reading is always conditioned by our consciousness of the book itself and its inalienable bookhood.

For bookhood is an intrinsic part of reading, even if often a subconscious one. We all register the size and weight of a book, the texture of the paper and the design of the typeface. We know what it is like to operate: how tight the binding is, and whether it requires two hands to hold it open. We clock the cover and the clues about the content of the book that might be signalled in its design, we know whether its spine is cracked, or its jacket scuffed, or its dark matt finish susceptible to fingerprints (Penguin Classics: I’m looking at you). We may work through it, marking our place with fingers or folded corners, or a bound ribbon, or a train ticket, a postcard, or pressed flowers, between its pages. Or we may use its multi-dimensional physicality in other ways: yoga block, doorstop, fly swat, flower press, deportment aid. We are conscious of its smell: the chemical high of ink or treated paper, the vegetal residue of human touch. Researchers have generated a historic book odour wheel, with smell categories including almonds, rotten socks, smoke, vinegar and musty (top tip: should you want to remove a bad book smell, perhaps of damp or cigarette smoke, leave the volume in a sealed box with some clean cat litter); numerous perfumeries have attempted a book scent,

from Demeter Fragrance Library: Paperback to Biblioteca de Babel by Fueguia 1833 ('notes of old book pages turned yellow, book bindings, and the polished wood of book cases').

All these sensory engagements, all these haptic activities, are different depending on the precise contours of the particular book in your hand. It's why buying a new edition of a much-loved book is always somehow alienating, even a betrayal. Jorge Luis Borges, the Argentinian writer and critic whose work is so preoccupied with imaginary books, stories and impossible libraries, professed himself intellectually uninterested 'in the physical aspects of books'. Nevertheless, he recalled with warmth what a specific edition of a book that he had studied for a lifetime, *Don Quixote*, had meant to him:

I still remember the red bindings with gilt titles of the Garnier edition. Eventually, after my father's library was broken up and I read *Don Quixote* in another edition, I had the feeling that it was not the real *Don Quixote*. Later a friend obtained for me a Garnier copy with the same engravings, the same footnotes, and the same errata. For me, all these things were part of the book; in my mind, this was the real *Don Quixote*.

Thus emotions run high where books and book behaviour are concerned: posting an image of a thick volume cut in half to make it more portable, the culprit outed himself on social media as a 'book-murderer'. Ask any

group of readers about their habits of writing in the margins of their books or inscribing their name and you will get a range of strongly held views. It's hard to imagine another inanimate object provoking similar outrage. As John Milton put it *Areopagitica*, his 1644 defence of 'the liberty of unlicensed printing' prompted by the arrest of the bookseller John Lilburne for importing subversive books, 'Books are not absolutely dead things, but do contain a potency of life in them.' That life is located in their physical form as much as in their metaphysical content. And as the context for Milton's much-quoted phrase acknowledges, bookhood travels far beyond consumer pleasure: sometimes, as we will see, books become proxies, standing in for human readers and suffering some of their displaced punishments and degradations. Books' materiality places them at the centre of larger debates about justice, liberty and cultural value.

Acknowledging bookhood demands that we resist the tendency to idealize them. Books are wonderful, challenging, transporting – but sometimes also sickening, disturbing, enraging. As in the book of magic with which we began, their meanings, forms and consequences are not innocent, or sentimental, or always nice. Discussing the books bound in human skin in Chapter 13 transposes bibliophilia, or the love of books, into a distinctly discordant key; thinking about forced conversions in Puritan New England (Chapter 15) fingers the book as a morally compromised agent in the colonial encounter. Not all books are *The Very Hungry Caterpillar*,

although that book's physical playfulness also sounds a note of caution. Eric Carle's first proposal was for a book about Willi the Worm, a bookworm nibbling through pages: this early iteration gives *The Very Hungry Caterpillar* a symbolic quality, in which what is being gobbled eagerly up is not so much the – to me in the 1970s, unspeakably exotic – pickle, watermelon, salami and cherry pie, but rather the book itself. Carle's allegory of reading makes clear that, as the caterpillar discovers, hungrily consuming books can give us stomach ache.

Often books about books glow with a rosy nostalgia for childhood reading, or map with delight the lifetime companionship of a much-loved novel or the inventive transformations of a canonical text across time and media. That's to say, they are about books as containers for fictional worlds, characters and ideas, not about books as distinctive manufactured objects conveying their own meanings which shape, and are shaped by, their readers. What's more, books about books tend to be about nice books shaping thoughtful, refined and creative people rather than about dangerous books with potentially malign effects. The material books in this book you are reading can be tricky, sometimes vicious; they have the power to misinform and manipulate as well as to comfort and educate. They are the symbols and the tools of unequal power relations, inscribing across their horizontal openings vertical social hierarchies – as here between master and pupil, and elsewhere between adult and child, and between colonizer and colonized.

As Walter Benjamin, cultural critic, philosopher and bibliophile, mournfully observed under the shadow of the Third Reich, ‘there is no document of civilisation which is not at the same time a document of barbarism’. He wasn’t directly talking about books, but he should have been. To understand our long love affair with the book, we need to recognize its dark side. This is a relationship in which each partner has the capacity to abuse the other: books can crack our spines, loosen our leaves, mark us with their dirty fingers and write in our margins just as much as we can theirs.

So, *Portable Magic* is an alternative, sometimes sideways, history of the book in human hands. It charts and reinterprets key milestones in book history from Gutenberg (Chapter 1) to Kindle (Chapter 16), tracing different patterns of book production and use through different case studies, including a wartime edition of a biography of Queen Victoria designed for a soldier’s uniform pocket (Chapter 2); a photograph of Marilyn Monroe reading *Ulysses* (Chapter 4); a rare book recounting a terrible natural disaster sunk with the *Titanic* (Chapter 6). As it is organized neither chronologically nor geographically but by theme, I hope that the chapters can be read in any order, depending on whether you think you are interested in Madame de Pompadour or the Gutenberg Bible, school library censorship or queer collage, diaspora or design. Later in the book (Chapter 7), I discuss the long history of dipping at random into a book to gain insight or advice, known, following the initial

deployment of Virgil for this literary and ethical tom-bola, as *sortes Virgilianae*. In this spirit, you might want to think of reading *Portable Magic* not as a long-term chore but as a kind of *sortes Smithianus*.

You may feel that this book should have been heavily illustrated, but the two-dimensional representation of these irredeemably three-dimensional objects always disappoints. Changing book technology has made pictures – in the manuscript Books of Hours, or in the modern exhibition catalogue – differently available to book producers at different times, but I hope that here I can draw on the historic capacity of books to describe and make vivid material objects through words, from the clock at the start of *The Life and Opinions of Tristram Shandy, Gentleman* to the richly imagined locations of Genesis, or Gilead, or Gormenghast. An inextricable part of the magic of the book is that it is fertile, generative of other worlds.

My point throughout is that the books that are on your bedside table or propping up your computer monitor, those volumes given to friends or family, inscribed by their givers or scribbled in by children, heavily thumbed and falling apart or pristine and unfingered, inherited, borrowed, devoured, treasured, organized by author, topic, size, colour – these books are important. They are vital exemplars of a resilient technology that has barely changed over more than a millennium but which has changed us, our habits and our culture. Materiality is not just a property of rare or special books,

although that's where specialists have tended to cut their teeth. Books are culturally and materially important precisely because they are democratic and everyday, not because they are too valuable to touch. Instead of meeting remarkable manuscripts at one remove, we can all run into amazing books which record rich, varied, sometimes troubled histories, both personal and political.

When I had the great privilege of uncovering a rare Shakespeare first edition in a chilly Scottish library, the thrill as I worked through the minutiae of its watermarks and the details of its printing to check its authenticity was more physical than intellectual. In three large volumes, each propped on a foam rest, the book's linen-rag paper was softened by centuries of fingers turning the pages. An inscription from an eighteenth-century scholar registered it as a bequest from a friend, reminding me of books' unique place as tokens of human affection (Chapter 3). But I'm not sure that that wonderful and valuable once-in-a-lifetime First Folio really meant more to me than many more immediate, mundane, magical book encounters: my battered large format Asterix comic books, or the anticipatory wedge of unread detective thrillers saved for holidays, or my grandmother's Edwardian school-prize poetry book, its spine repaired by a local bookbinder for her eightieth birthday, or the pleasing compact weight of the cream-and-black Everyman hardbacks with their ribbon bookmarks, or the acrid smell of a new, illustrated exhibition catalogue. While some books do have old-master price tags, really,

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books are ordinary things that become special in the unpredictable and unique human connections they embody and extend. We all encounter rare and valuable books all the time.

Birdwatchers are alert to the particular, distinctive combination of avian affect, movement and presence that they call jizz: I've tried to transfer that delighted awareness of the specific to my account of books. I hope that *Portable Magic* will make you more appreciative of all the book jizz, the bookhood, of your own life and library.

I

Beginnings: East, West and Gutenberg

A small band of survivors finds sanctuary in the Beaux Arts arcades of the New York Public Library on Fifth Avenue. Outside, a flooded Manhattan is freezing solid in sudden sub-Arctic temperatures. Only the tip of the Statue of Liberty's lamp and her pointed coronet are visible above the ice plains. Far away, politicians argue about their response to the climate catastrophe gripping the northern hemisphere: meanwhile, a grizzled climatologist in parka and snowshoes is trekking through epic cold to keep a promise to his teenage son.

The group ransacks the shelves for fuel to keep warm. Librarians make a vain attempt to protect their collections. A scuffle about the value of Nietzsche – most important nineteenth-century thinker or chauvinist pig in love with his sister? – is averted by the discovery of the tax law section, which all agree can be readily consigned to the fire. The next crisis over resources comes when a librarian (cue buttoned-up duffel coat and heavy glasses screaming 'book nerd') refuses to surrender the large leather-bound volume he is clutching on his knees. The Gutenberg Bible. 'Do you think God will save you?' is the sarcastic retort. The man's reply makes clear that it

is not the scriptural contents he is clinging on to. Rather, he delivers an impromptu eulogy for the importance of this object as an artefact of human ingenuity and progress: 'I'm protecting it. This bible is the first book ever printed. It represents the dawn of the age of reason. As far as I'm concerned, the written word is mankind's greatest achievement. If western civilisation's finished, I'm going to save at least one little piece of it.' In a paradoxical symbolic twist, the NYPL copy of the Gutenberg Bible comes to represent something like the secular enlightenment, or even humanity itself.

The occasion for this heartfelt defence of a book amid a general bibliocide is Roland Emmerich's climate-disaster movie, *The Day after Tomorrow* (2004). It seems like a throw-away vignette (and yes, of course they should have burned the chairs and shelves first, given how unsatisfactory books are as fuel) but is in fact a crucial plot pivot. Recognizing the value of this specific book redirects the film from a story of human helplessness in the face of nature to a celebration of human technology and resourcefulness. Hero-dad and Gutenberg (often dubbed the 'father of printing') together secure humanity's post-apocalyptic future, reassuring us that something important can survive Armageddon. But to understand the role of the Gutenberg Bible in larger narratives of books' and human progress, we need to flesh out the film's hyperbolic cultural and historical claims. Is this the beginning of our long love affair with books? Was this the first book ever printed? Does Gutenberg's Bible represent 'mankind's

greatest achievement’? And what is its relationship to ‘western civilisation’? As we’ll see, the answers to these questions are sometimes disobliging to cherished myths of origin, enmeshing the printed book within a larger, more combative and political narrative. It’s good to be reminded from the start that books – their production, their form and their content – are never neutral.

Johann, or Johannes, Gutenberg has earned his place in history as the inventor of movable type. This enabled text to be set from individual letters and then reproduced multiple times using a printing press. It is to book production what opposable thumbs are to primate evolution. Like all origin stories, this one overlooks a good deal in order to produce a single, heroic starting point, but let’s go with it for now. Born in Mainz on the River Rhine around 1400, Gutenberg trained as a goldsmith and was later involved in various enterprises, including wine-making. Both these crafts had an impact on the development of printing, which required both the fine metal work of individual pieces of type known as sorts and the re-engineering of a grape-press mechanism to create print impressions. Gutenberg’s entrepreneurial attempts to mass-produce relic-viewing mirrors for a popular pilgrimage site also suggest an inclination towards innovative technologies of reproduction. These skills, combined with the capital of a new business partner, the wealthy lawyer-goldsmith Johann Fust, fed his audacious print experiment.

To produce the new commodity of the printed book, everything – from type to appropriately prepared paper

to ink – needed to be re-engineered. But in some significant ways, the mechanically printed Bible wasn't such a radical break with the handwritten books that came before (and continued after). While the printing press clearly was a game-changer for the speed of book production, preparing the complete Bible for print publication was still a hugely time-consuming enterprise. The Gutenberg Bible ran to 1,282 pages, split across two volumes. Each page had two columns and, with a few exceptions, forty-two lines per column (the book is sometimes known as the 42-line Bible because of this). It probably took six pressmen about two years' work in total to produce the 170 or so copies that were printed. Just like its manuscript forebears, this labour-intensive product was a distinctly elite commodity.

The finished Bibles appeared in 1455. The numbers involved really remind us of the materiality of these books. The majority were printed on paper, but a small proportion were produced on the substrate associated with the work of scribes – vellum, or calfskin – which could be sold at four or five times the price of the paper copies. To make up the Bibles, which measure around 42 by 30 centimetres – a little smaller than modern A3 format – would have required five thousand calf skins from five thousand calves for the vellum copies, and fifty times that number of sheets of rag or linen paper. The paper was produced in Piedmont and sent over the Alps and then by barge to Mainz. It is all a big supply-chain effort.

Gutenberg's Bibles were all printed in the Gothic script associated with missals (priests' service books) and other liturgical volumes, but the neat appearance of the compact type form actually serves to obscure its innovation. The printed pages look like continuous handwritten script. The forty-eight complete or substantially complete extant copies have an appearance that is thus part new world of print, part old world of manuscript. We are used to new technologies adopting the terminology and taxonomic structures of the older ones they apparently supersede. Computing, for instance, has taken up the analogue office iconography of files, folders, directories, desktop, notebook; digital photography includes the redundant but resonant sound of a shutter opening and closing; e-books mimic the layout and page-turning effects of their print antecedents (Chapter 16). This phenomenon of new technologies aping their predecessors is called skeuomorphic design. In similar ways, Gutenberg's printed book doffed its aesthetic and organizational cap to the manuscript predecessors it was attempting both to imitate and unseat. The two text columns and the Gothic typeface aligned the reading experience with that of manuscript – but, beyond this, rubrication (highlighting in red), illuminated capitals and colourful marginal scrollwork were usually added to the Bibles after they left the print shop. This decorative supplement not only drew on the visual conventions of the manuscript tradition but was in fact supplied by its experienced scribes. Thus the book often credited with being the first in print was actually

designed to be completed by hand, inaugurating a long tradition of readers finalizing or perfecting their books (Chapter 14).

In other ways, Gutenberg's return to a large lectern-style Bible also looked backwards rather than forwards. His retro choice of format recalled popular Bible books of previous centuries, in contrast to the small, portable scriptural books that had recently been popular. Like many technological innovations, then, this printed book was actually a technological and aesthetic step backwards (like those stilted early talkies, hampered by the need for the actors to keep close to the microphone). Manuscript books had developed an elaborate visual *mise-en-page*: the (initially) unadorned and cumbersome Gutenberg was a much less beautiful and decorative book than its predecessors.

Regardless, the new book made an immediate splash. Looking at its printed pages against a strong light, it's possible to see one of three different watermarks – an ox, a bull's head, or a grape cluster. It's clear from these different stocks of papers that Gutenberg made a second order for supplies during the production process, suggesting that he revised his original print forecast upwards. This must have been in response to promising pre-sales. One excited cleric, later Pope Pius II, wrote to his superior that he had seen, or heard from others about, some printed quires (bundles of folded sheets) from this new Bible at Frankfurt, and could testify that 'the script is extremely neat and legible' such that 'your grace would

be able to read it without effort, and indeed, without glasses'. The book can indeed be read relatively easily from a distance of about a metre, suggesting its practical usefulness in church services in low-light settings. (An alternative history of the book would be via a history of reading glasses, which were first depicted in a 1352 portrait of Hugh of Saint-Cher by the Italian painter Tommaso da Modena.) But the enthusiast reported that it would now be difficult to acquire one of the new Bibles, since it appears that the print run was sold out before publication. Despite this success, Gutenberg's printed books could not balance his account books. Even with the goldsmith's investment, both the Bible and Gutenberg's printing career were over at the same time. The business was bankrupt by the end of 1455, and the printing equipment confiscated by Fust.

So far, then, so familiar. Gutenberg invents printing and everyone flocks to buy the new books. But not so fast. Printing was not simply the work of one entrepreneurial visionary and his banker. There was a broader international context too. Printing was not, in fact, previously unknown – it just hadn't travelled to Europe, because the demand wasn't there: hitherto, the continent had been broadly content with limited access to literacy and to written texts. The scriptorium method of manuscript production was adequate for this restricted market. We tend to think of printing as leading to the wider circulation of texts, but there's something to be said for flipping cause and effect: the innovation was a

response to increased demand. ‘This book . . . is not written with pen and ink as other books [have been], to the end that every man may have them at once,’ as William Caxton, Gutenberg’s English acolyte, put it in the first book published in London. Early printing was too time intensive to realize this democratic dream, but the direction of travel was clear and irreversible. There was a growing market for the products of the printing press. It was this potential customer base that created the economic and entrepreneurial incentive to develop it.

Gutenberg was a savvy businessman who targeted his market carefully. His decision to produce a complete Latin Bible, based on the Vulgate edition, rather than the more common missals which organized biblical passages around the Church year, reveals that he was aiming at a substantial international readership far beyond the streets of Mainz. He was also plugging a gap in the manuscript market, making use of the new printing technology to produce a substantial text that was relatively rare (most biblical manuscripts were of the Gospels, or the separate Testaments, or Psalms.) This doctrinal branding of what was, at heart, a moneymaking project was picked up by John Foxe when he wrote in his expansive sixteenth-century history of the Protestant Reformation that printing was ‘a divine and miraculous’ gift from God, ‘to convince darkness by light, error by truth, ignorance by learning’. Later historians would also align the print revolution with the rise of Protestantism, particularly because the works of the reformist theologian Martin Luther

were among the first international bestsellers of the print revolution.

But the immediate religious context was rather different. The ambitious Bible was not Gutenberg's first printing project: his press had already produced a grammar textbook, a poem, a Papal Indulgence (a spiritual voucher allowing time off from Purgatory) and, most interestingly, a topical pamphlet, printed in German in December 1454 as *Eyn manung der cristenheit widder die durken* (*A Warning to Christendom against the Turks*). That this last text includes the first printed New Year greeting ('Eijn gut selig nuwe jar') has tended to obscure the larger geopolitical project to which Gutenberg's press was immediately enlisted: the war against Islam.

In May 1453 the Byzantine Christian capital Constantinople had fallen to the besieging Ottoman army, led by the young Sultan Mehmet II. It became an Islamic city renamed Istanbul, and the Ottoman capital. This event shocked Europe. The fall of Constantinople was feared as a clear and present danger to Christendom, although local rivalries prevented any coordinated response. From the start, Gutenberg's emerging print work was intertwined with discussions about possible military action across the German states, and it capitalized on the fraught relations between Christianity and Islam. The event in Frankfurt from which excited reports of the new printed Bible emerged was on the fringes of a meeting of European nobles and princes of the Church which had been called to discuss ways of rallying public support for a

military campaign against the Turks. Just before their Bible emerged from the presses, Gutenberg and his associates were present to promote their new product and present some samples. Large-scale Bibles must have looked like a canny sales opportunity at a time when Christendom felt itself under threat: their very size reimposed Christian dominance. In turbulent times, these big books proclaimed that, like the religion they embodied, they were here to stay. We might compare them with the miniature Bibles with small script developed in the different context of the thirteenth century for Dominican and Franciscan friars to carry on their preaching itineraries: the formats tell us something about the state of Christianity as well as the intended use of the volumes.

So it was printed anti-Turkish material, not the Gutenberg Bible, that opened the publishing floodgates – but perhaps we should see the 1455 Bible as an explicit salvo in that religious war. The so-called *Turcica* that followed in its wake was an explosion of print, in genres from woodcuts and ballads to orations and treatises, all designed to meet an insatiable public demand for material about the Ottomans and to debate the question of a new crusade to retake Constantinople. Demand for this Turkish material helped drive print technology rapidly across northern Europe and beyond: within thirty years there were over a hundred printing towns, including London, and by the end of the fifteenth century that number had doubled. The Gutenberg Bible, and the

printing industry itself, thus emerged in response to the religious geopolitics of the fifteenth century. It was a more specifically ideological intervention than is often acknowledged, less impartial and more specific and sectarian. That fictional NYPL librarian's claim about 'western civilisation' takes on a more adversarial quality in this context: East–West conflict shaped his precious Bible and its initial reception in the fifteenth century, and it has continued to shape our print culture in ongoing and indelible ways.

The cultural status of the Gutenberg Bible reproduces a myth of Western superiority. Assertions about Gutenberg's primacy, such as that in Emmerich's fictionalized New York Public Library, have fallen for its original propaganda. We tend systematically to downplay the pre-Gutenberg histories of print and to ignore the prior histories of textual reproduction outside Europe. The resulting incomplete narrative serves to align mechanical printing with the European Renaissance and early humanism in a triumphant story of the dominance of Western Enlightenment values. But although the Bible printed in Mainz in the middle of the fifteenth century is a cultural milestone, it is not the earliest book nor the first to use movable type. Some of the prominent precursors of Gutenberg's Bible should be a bit more famous as print milestones. The British Library has a five-metre scroll of Buddhist scripture, *The Diamond Sutra*, printed in 868 (according to the Western calendar). Found in north-west China at the beginning

of the twentieth century and comprising columns of characters and an illustrative frontispiece, it is the earliest dated example of block printing. Chinese and Korean pioneers of print pre-dated Gutenberg by centuries, and the relatively low cost of bamboo-fibre paper in East Asia meant that early print was a less elite technology in these regions. Chinese print technology developed movable type, made of clay and used to make an imprint on paper without a press. Paper technology was also refined by Chinese innovation during the Later Han period (by the second century CE): of course, Buddhist, Jain and Hindu book cultures would not adopt parchment, the skin of young animals, including cows. The paper pioneer Cai Lun (died 121 CE) reported that ‘silk is dear and bamboo heavy, so they are not convenient to use’, and had the idea to use tree bark, hemp, rags and fish-nets to make ‘silk-like writing material’. Paper availability and widespread literacy drove commercial printing in China by the Tang Dynasty (seventh–ninth century CE), and the first woodblock edition of the canon of Confucian classics dates from the tenth century. The oldest datable book printed using movable type is written in Chinese by a Korean Buddhist monk. Only the second volume of the work is extant, now in the Bibliothèque Nationale in Paris. Known by the abbreviated title *Jikeji*, it is a compilation of Buddhist teaching and dates from 1377. By the beginning of the fifteenth century, printing and distributing books in the interests of good government was an explicit policy of King Taejong, who ordered the casting

of sets of metal type to enable widespread print penetration across Korea. So, the idea that print is a European invention simply doesn't stand up: it is a Western myth. Seen from a more global perspective, the question about Gutenberg seems less how did you do it? and more what took you so long?

The Gutenberg myth is one of the most striking examples of the amnesia intrinsic to traditional narratives of the Renaissance, which have tended to obliterate the role of technical, cultural and scientific discoveries and scholarship in Islamic and East Asian cultures and to naturalize the spread of Protestantism across northern Europe as the precursor of the Enlightenment. To put it another way, it's a history written by the winners. Observing the overthrow of the Ancien Régime in Revolutionary France, Louis Lavicomterie apostrophized Gutenberg: 'Blessed be the inventor of the printing press. It is to him we owe this wondrous revolution.' Victor Hugo's comparison of Gutenberg to Jesus – 'In the action of Christ bringing forth the loaves, there is Gutenberg bringing forth the books. One sower heralds the other . . . Gutenberg is forever the auxiliary of life' – is a hyperbolic version of the Western-centric framing of the establishment of print.

Gutenberg's central role in stories of cultural progress was retrospectively corroborated by the importance of print technology to European colonization. Religious presses set up in the sixteenth century by the Jesuits in Goa and Macao and by the Spanish in Mexico City and

Lima were the precursors of colonial printing across the global south. It was such a common travelling trope that Thomas More adopted it for his fictional Utopia early in the sixteenth century, supplying his voyagers with book exemplars from Aldus Manutius's Venetian printing house so that the Utopians could teach themselves printing. Later colonists also took with them print technology. The first book published in Australia was a collection of government proclamations and rules prepared by the transported London printer George Howe in 1802; a Maori New Testament in 1837 published by the Cornishman William Colenso on behalf of the Church Missionary Society was the first printed book in New Zealand, followed in short order by *Ropitini Koruhu*, a translation of Defoe's *Robinson Crusoe*; Presbyterian missionaries established printing in Nigeria in the middle of the nineteenth century. Christian evangelists brought printed books as part of a larger assertion of literacy over orality, in an attempt to spread a textual view of the world. As the printed book moved southwards it carried its own colonial imprimatur. Printing became a tool of empire, and therefore it was all the more important to its sense of imperial superiority that its own origins should seem securely European.

While the Bibles printed by Gutenberg are fifteenth-century artefacts, the concept of the 'Gutenberg Bible', sometimes called the 'Mazarine Bible', is a nineteenth-century invention. It was then that the book gained its high cultural and financial value. It is hardly surprising

that the veneration of Gutenberg as the father of printing, the wilful forgetting of the history of print technology pre-Gutenberg and the exponential rise in the cultural and economic value of copies of the 42-line Bible all coincided with the age of empire. Just as Europeans asserted the superiority of their technologies as the justification for, and means of, colonial control, so too they erased the technological achievements of the Orient. Mainz erected a statue of Gutenberg in 1837: the bas relief shows printing across the continents, including Chinese readers of Confucius, Wilberforce and the printing press liberating enslaved African peoples, the artistic achievements of Kant and Schiller, and the signatories to the American Declaration of Independence. More statues followed: Strasbourg and Frankfurt in 1840; Gdansk in 1890; Vienna in 1900. These public assertions of Gutenberg's cultural significance in narratives of human progress – contrary to Gutenberg's own invisibility in his books, which never include his name – set the scene for collectors to bid ever higher prices, making the Gutenberg Bible the most valuable book in the world during most of the nineteenth century.

The New York Public Library does indeed have a copy of this extraordinary book. It acquired it via the famous eighteenth-century French librarian and scholar Abbé John-Joseph Rive. At some relatively early point in its life it lost its first four leaves. We might expect this to have been the story of creation, but the Gutenberg printed St Jerome's epistles before the book of

Genesis – a reminder that what is included in a Bible continues to fluctuate throughout the history of Christianity. These missing leaves were supplied in facsimile at the beginning of the nineteenth century by the brilliant typographer Firmin Didot, using initial capitals cut from some other volume. This practice, known as sophistication or, more joyously, as vampment, was common as the trade in rare books developed during the nineteenth century. Abbé Rive's Bible spent time in the collection of George Hibbert, an MP, amateur botanist and book collector whose tastes were bankrolled by Jamaican slavery on his family sugar plantations. When an American collector, James Lenox, bought it for what was described as the 'mad price' of £500 in 1847, it became the first copy of a Gutenberg Bible to go across the Atlantic (half of all the extant copies are now in the US). *The Times* described it as 'a beautiful work, which, from the extreme care that had been taken of it, appeared to have been but recently issued from the press'.

So, the Gutenberg Bible's cultural status draws on and perpetuates a wider narrative of European cultural dominance, even as his press capitalizes on Islamophobia and the anxieties about the survival of Christianity's empire at the end of the Middle Ages. Printing and paper were already available technologies just waiting for their European moment: the combination of Gutenberg's entrepreneurial restlessness, shifting geopolitics and the wider appetite for reading matter created the occasion. These factors produced a technology that was always

and already implicated in social, political and religious debate.

The Day after Tomorrow ends with mass migration southwards: the climate catastrophe means that previously prosperous and dominant northern territories have become too cold to support human life. Scenes of crowds waiting at the US border with Mexico, for instance, overturn the familiar exodus, as it is the Americans who are trying to escape. But amid the devastation, there is hope. Or perhaps not hope exactly, but rather the promise that some things will be preserved in an uncertain future; or maybe even that history repeats itself. As a rescue helicopter picks up the last New York Public Library survivors off the icy plain, we see that the librarian is still carrying the Gutenberg Bible. The film thus reproduces in miniature a larger, and more dangerous, cultural narrative of overvaluation. Emmerich turns this book, and the origin myth it encapsulates, into a kind of fetish. The volume that seemed to represent the first step in human progress towards enlightenment and reason has become, like so many of our books, a deeply irrational material thing.