“Who Created the New and Copied the Old”: Printed Books of the Fifteenth Century

An Exhibition Featuring the David Wertheimer, Class of 1977 Collection of Early Printed Books

Curated by Alexandra Stern ’20

Rebecca and Rick White Gallery—Lutnick Library—Haverford College

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In the year 1492, a young abbot in the region that would eventually become Germany published a scathing treatise entitled *In Praise of Scribes*. In this piece, thirty-year-old Johannes Trithemius denounced the novel technology of mechanical printing, asserting that machinery must not be permitted to destroy the established tradition of hand-copying, nor to replace dutiful monks with lazy printers more interested in quickly amassing a cheap library than working to please God with their labor. For Trithemius, the dangers of the printing press extended beyond the moral failings of its operators to the potential lack of longevity for information contained within a printed tome:

The printed book is made of paper and, like paper, will quickly disappear. But the scribe working with parchment ensures lasting remembrances for himself and for his text.¹

Ironically, Trithemius’ words of caution about print survive today because of his decision to print his treatise rather than disseminate it by hand. His commentary on the new technology of the printing press provides a moment that is instantly familiar; Trithemius’ concerns about the change from the practices of the existing world to the new technologies of efficiency and mass production are not far removed from the anxieties expressed about contemporary technological developments and their impact on the moral and intellectual culture of our world today.

If we are to take any sort of lesson from Trithemius to apply to our contemporary moment, it would perhaps be that these concerns about the immediate replacement of techniques and materials that feel familiar, with less intimate mass produced goods, are not quite as dire as they might initially appear. In the fifteenth century, printing was deeply interwoven with the tradition of the manuscript, even as the production of printed text surpassed that of the traditional manuscript. The advantage of hindsight allows us to see that Trithemius’ anxieties about the survival of printed text were overblown; in fact, the survival of text was improved by the sheer volume of production enabled by the press, not undermined by the materials it used, as evidenced by the survival of his own writings.

In the period of early printing, the mechanical press facilitated a massive increase in the numbers of existing books; however, rather than representing a clean break with the past, the printed books of the fifteenth century were very much a part of the existing practice in their design, usage, and placement within the scholarly conversation of medieval Europe.² While printed books were produced using different technologies, the fundamental concept of a book remained constant.

The Technology of Printing

Although mechanical printing was new to Europe in the fifteenth century, it had been practiced in various regions of East Asia for centuries. Xylographic printing, which employed carved wood blocks to print individual pages of content, was invented in China between the years of 636 CE and 868 CE. The technique required each page to be carved in full on a wood-block, creating a full page image that could be reused but could print only a single page.³ Around the beginning of the fifteenth century, European book-making began to include block-books (books produced using xylographic techniques).⁴
While this technique facilitated the production of multiple versions of a single text, block-books were relatively slow to produce and often contained errors or a lack of clarity as a result of wear and damage to the wood-blocks. Block-books were typically printed on a single side of each leaf of paper, adding to the amount of time and resources required to produce a book.

Altogether, the number of block-books produced in this period, while significant, was far lower than the total quantity of books produced by hand. These books, today called manuscripts (hand-written books), were copied individually by scribes, including monks and nuns, and could be produced at a faster rate than block-books. Like any form of material culture, there was much variation in the design and decoration of manuscripts. While the most famous surviving examples of medieval manuscripts featured elaborate decorations and illustrations composed of gold leaf and colored ink, manuscripts, particularly those that were used by students within universities, could also be unadorned.

The first example of the printing technique that would eventually be widely employed in Europe, called movable-type printing, dates from the beginning of the thirteenth century on the Korean peninsula. Movable-type print, unlike xylography, utilized individual metal or earthenware pieces representing a unique letter, symbol, space, or combination thereof arranged inside a frame to create a full page of text. Once the full page was printed, the pieces were rearranged to create the next page of text.

Moveable-type print allowed printers to reuse the same set of letter blocks not only across all the pages of a book, but also across all of the different books they might print in their shop.

Around 1450 in the city of Mainz (in what is now Germany), three men—Johannes Gutenberg, Johann Fust, and Peter Schöeffer—commenced operation of the first movable-type printing press in Europe. The first known texts to be printed using this press included a German poem and several papal indulgences. By 1455, they completed production of their 42-line Latin Bible, the book for which they are most famous today.

Approximately 180 copies of this Bible, colloquially referred to as “the Gutenberg Bible,” were published, and almost immediately the technology of the movable-type printing press exploded across the region. Presses first appeared across present-day Germany, moving from Mainz to cities like Strasbourg and Cologne. Within twenty years, they operated in cities across Europe, with major print centers clustered along the Italian peninsula and throughout present-day Germany. By 1500, only fifty years after the invention of the press, there were presses in over...
250 cities, with many of the largest cities hosting multiple presses. In these fifty years, an estimated eight million individual books were printed, approximately five hundred thousand of which survive today. With this massive increase in available books on the market, prices for many texts decreased rapidly.

More Alike than Different: The Printed Book In Comparison with the Manuscript

The printed book did not immediately replace older techniques of book production, as manuscripts were produced throughout the following centuries. Although mechanical printing would quickly surpass the rate of production of books by scribes, manuscripts were still preferred by the aristocratic and religious elite for their aesthetic, labor, and spiritual values, the very values espoused by Trithemius as crucial to protect in his treatise against the printing press. Although printing enabled a fundamental shift in the technical process of book production and the quantity of books available for consumption, at its core, the printed book was not radically different from its manuscript counterpart.

At the most basic level, the manuscript and the printed book were created using the same materials. Although traditionally manuscripts were produced using parchment or vellum (specially treated animal skins), by the fifteenth century manuscript production was independently moving increasingly towards the use of paper, particularly for manuscripts intended for use outside of aristocratic libraries. The other core material of a book, ink, was shared between the two technologies as well.

Similar too was the design of the printed text to its manuscript counterpart; all three of the major typefaces employed by early printers, including Blackletter (Gothic), Antiqua (Roman), and Italic, drew inspiration from contemporary and classical scripts, mimicking the work of a scribe through the printing press. Although printed typefaces presented less variation between individual characters than handwritten script, the overall appearance of a printed book in any of the three major typefaces can be difficult to distinguish from that of a book copied by a scribe, albeit an incredibly neat one. Printed books also
printed texts featured only text, initials, and images. Indexical and organizational features like page numbers, appendices, indexes, chapter headings, and title pages would not develop fully for decades, representing not only a shared system of categorization of information between the technologies, but also an aesthetic preference for traditional structures.  

Beyond Aesthetics: Cost and Content of Printed Texts and Manuscripts

As with manuscripts, there was great variety in the ways in which printed books were treated after they were removed from the press. Because much of the process of creating a printed book, most notably binding and commissioned decorative features, was typically completed outside of the printer’s shop, even copies of the same text from the same print run could appear completely distinct from one another in their final forms. This process ensured that, as was the case with manuscripts, the cost of a printed book could vary greatly based on its intended use. Like those manuscripts produced for use by a student at a university, many printed books cost very little; such books were typically bound in plain, unadorned bindings. Other printed books, by contrast, could feature incredibly elaborate bindings produced with high-cost and quality materials. While this great variation in both treatment of the book and the associated cost might appear to suggest a change in market

Notably featured decorative initials to mark new sections of material, just as had been done for centuries within manuscripts. At first, these initials were added by hand after the completion of the printing process, either by the printers themselves or by an artist commissioned by the owner. In many instances of early printed books, the spaces left for these initials are still visible, as the books have never been decorated by hand. Later developments in printing within the fifteenth century popularized the use of woodblocks, the major technique used for printing illustrations, to mechanically produce initials during the printing process; however even these printed initials contain many similar elements to those included in manuscripts.  

While the similarities in core materials can be largely attributed to a shared fundamental technique, that of applying ink to smooth, porous surfaces, and a movement towards the most efficient materials for this technique, the similarities between the type of a printed text and the script of manuscript are a clear attempt to reproduce the appearance of a manuscript, linked to an effort to maximize legibility and cater to consumer preferences dictated by the kinds of text already familiar to the market.  

Similarly, the organization of information within a printed text attempted to mimic the layout of the manuscript with the intention of presenting the content of the text in a way that was familiar to consumers. Like manuscripts,
patterns facilitated by the ability to print copies of books at much lower costs, in actuality this trend is completely in line with the established pattern of manuscript production.

Perhaps the most notable point of continuity between printed texts and manuscripts was the content of a book itself. Although new texts by contemporary authors were printed in the fifteenth century, the majority of printed books put into circulation were those that already existed in manuscript form, now disseminated in greater quantities. The limitations placed on book production before the printing press by time, resources, and popular demand via literacy rates ensured that book production was largely intentional, with texts selected for dissemination because of their value and placement within religious and scholarly conversations. The fact that the first printed books largely contained the same core texts as their manuscript counterparts implies that, while the use patterns of printed books were affected by their wider net of distribution, the printed book was used in fundamentally the same ways as a manuscript.

**Printed Book and Manuscript Usage Within Universities**

From as early as the twelfth century, notable universities were in operation across Europe, including particularly influential universities at Paris, Oxford, Cambridge, and Bologna. At these universities, scholars were educated in the traditional seven liberal arts, including mathematics, geometry, astronomy, theoretical music, rhetoric, grammar, and logic, with the opportunity for further education for those specializing in law, medicine, and theology. Scholarly conversation within these universities relied heavily on the works and teachings of previous individuals, collected and preserved in manuscript form. These texts, including scholarly treatises and primary source material from important political and religious figures, as well as material sourced from classical antiquity, were used as textbooks, which could be purchased or rented from a local bookseller. While production of textbooks or primary materials for study was inhibited by the speed of hand-copying, altogether, based on the
small populations of scholars, there were likely sufficient manuscripts available for students to complete their studies.²⁶ Following the rise in popularity of the printing press, as presses commenced operation in the regions and cities surrounding most universities, textbook usage shifted from entirely manuscript material to majority printed books.²⁷ Crucially, the bulk of editions intended for use in universities or within libraries by scholars were reprints of books that had already been in use, including a wide variety of texts by classical authors.

Printed books featured a large increase in the number of titles by classical authors, in part due to the movement of Greek-speaking scholars from Constantinople following the fall of the city in 1453.²⁸ While many of the classical texts brought to the attention of western European scholars at this point were written in Greek, because of the difficulties presented by the Greek script for the production of individual pieces of type, as well as the use of Latin as the language of scholarship in the West, the majority of these texts were translated and circulated in Latin.²⁹ While variation in the translation of these texts certainly existed, several of our present standard translations of these classical texts draw heavily from the original translations into Latin from the fifteenth century.

Other classical texts, including many that would form the basis of scholarship within universities in Europe in the following centuries, were translated from versions of the texts in Arabic that had been used within the scholarly centers of the Middle East for centuries prior.

Although these new translations of classical texts were produced using a different technology, the texts were still utilized in the same fashion, that is to say, they were still put into conversation with each other by scholars in the traditional ways. In this way, the development of scholarship throughout the fifteenth century was an augmented version of that which had existed before.

Contemporary standard translations of the Historia Romana, or Roman History, by classical author Appian of Alexandria are descended from this translation of the text published in the fifteenth century.

Printed Book and Manuscript Usage Within Religious Life

Just as text, in both manuscript and print form, was central to the experience of scholarship in medieval Europe, it was central to the practice of religion. For many individuals, Christianity dictated the rhythms of daily life, beginning with their birth, baptism, and concluding with their eventual burial. Within their lifetime, religion set the structure of the day, week, and year, marking times devoted to prayer and days devoted to religious festivals. Text guided the experience of religious life for the public, providing the basis for the sermons preached in
Works by the prolific sixth-seventh century Pope Gregory I (Gregory the Great) were especially popular both before and after the invention of the printing press. Following the invention of the printing press, large quantities of theological texts were printed for use in university and monastery libraries.30 The press facilitated a great increase in the volume of available theological text; however there is very little evidence to suggest that it was used any differently than it had been before, when it existed only in manuscript form. As before, these texts were employed to facilitate further theological debate and diversity among clergymen and theologians, as evidenced by their placement within libraries and role in the development of the contemporary theology of the moment. There was also a heavy emphasis on printing works that had formed the basis of theology for many years, including large volumes of work by historic popes. Contemporary theologians and religious

Printed sermons could be used by local priests in their own services. This collection of sermons, attributed to the fifteenth century Dominican preacher Gregorius Britannicus, includes text for use by local priests officiating at funerals. The funerary sermons are divided into those for use in funerals for vulgares (common folk) and litterales (learned individuals). their local church and materials for the practice of religion within their home. Available texts included Bibles and collections of psalms and other prayer material, but also famous sermons and texts written by noted religious figures of the past. While manuscript Bibles and prayer materials could be produced so that they were, in theory, affordable to a family outside of the aristocratic elite, even individuals who were not able to afford their own copy of a religious text would have interacted with texts through their local priest in and outside of church services. Theological texts and materials related to religious figures, such as papal writings and decrees or collections of the writings of saints, were largely restricted to elite members of the clergy or scholars of theology through their high cost, placement in libraries, and requisite advanced Latin literacy.
figures were able to publish their work using the printing press, although this development cannot be ascribed to the printing press, as contemporary works circulated consistently throughout the period before the invention of the press. While the increased volume of available theological texts might have permitted individual scholars to access a broader variety of texts than they had before, it would perhaps be more accurate to say that texts were not used by these individuals in a different way, they were simply used more.

Printed materials were not limited to those for use in university and monastery libraries, however. The printing press was also used to produce editions of devotional material, including Bibles and psalters that had been used in manuscript form in the period before the invention of the press. Ultimately, even as biblical and other devotional materials were produced in greater quantities, it is difficult to approximate the percentage of the population that owned personal or family copies, and even harder to identify in the historical record the number of individuals who were able to read personal copies.

Even if individuals did not own their own copies of devotional material, or lacked the resources to attain literacy, it is possible that printed material impacted their daily experience of religion. The wider production of historic and contemporary sermons likely influenced the preaching of local priests, who would have possessed the requisite levels of literacy to interpret the texts, and who could then pass the morals or messages of the printed sermons to their parishioners. Texts also likely impacted the experience of confession, as the printing press provided guidance for counseling parishioners through confession, outlining in detail the proper response to virtuous or sinful behaviors.

The *Manipulus Curatorum* (on top) was written as a guide for parish priests in 1333 by the noted clergyman Guido of Monte Rochen. The book provides instructions for local priests on conducting the sacraments of baptism, penance, the Eucharist, marriage, and last rites. It also provided guidance for counseling parishioners through confession, outlining in detail the proper response to virtuous or sinful behaviors.
enabled the publication of more editions of
guides for local priests outlining these practices.

Even with these possible imaginings of the
impact of printed books the function of the text
was not inherently different from its function
in manuscript form. While there was, in theory,
more information and knowledge that circu-
lated around an individual, the impact is not
dissimilar from what would have occurred had
there simply been an increase in the number of
scribes in each region producing manuscript
copies of the text. In this way, it is difficult to
attribute developments in existing devotional
practice to the invention of the press, and not
other societal forces.

Early Printing: A Revolution?

The narrative of the invention of the printing
press has long been co-opted by those who desire
to see the progression of history in Europe as an
inherent movement towards “Western ideals” of
enlightenment and truth. For this reason, it is
important to look at the first printed materials,
and to question the impact the printing press had
on the world in the fifteenth century, and espe-
cially to challenge the narrative that the invention
of the printing press was “revolutionary.” The
continuity across printed texts and manuscripts,
whether in their aesthetics, accessibility, or appli-
cation, suggests that, in the fifteenth century,
printing was less of a revolution, and more of a
development in existing technology.

Although it is unwise to ascribe universality
to any historical phenomenon, history to this
point seems to suggest that technology implicitly
brings with it anxieties about the future and the
survival of the practices that feel most familiar.
In moments of contemporary anxiety revolving
around the development of new technologies,
it would perhaps be useful to consider, if not
directly compare, the moment of the advent of
print. Like Trithemius, we might find ourselves
worrying that the values of our traditional tech-
nologies might fall to the wayside. While there
are undoubtedly dangers to technology, perhaps
we can find comfort in the understanding that,
in the fifteenth century, while the technology of
book production shifted, the core understand-
ing of what made a book a book remained. The
printers of the fifteenth century did not design
their new printed books to be similar to manu-
scripts because of a desire to trick the public, or
to make them believe they were holding some-
thing produced by hand and not by machine.
Instead, they produced their books in the ways
that they did because they were at their core a
book, and so they produced them to look and
behave as such. While technology may change,
ultimately, the changes it makes might not be
as immediately abrupt and world-shattering as
might be otherwise anticipated.

Front cover illustration
Insulis de Alenus. Doctrinale altum, seu, liber
parabolorum Alani metrice descriptus cum sentitiis
et metrorum expositionibus utile ad bonorum
morum instructionem. Cologne: Henricum Quentell,
ca. 1492.

Rear cover illustration
Notes on Becoming a Collector of Fifteenth Century Printed Books
David Wertheimer ‘77

In 1966, when I had just turned eleven years old, my mother put a small pile of New York City subway tokens in my hand and said, “This is a fascinating city. You should go explore it.” Having grown up on the Lower East Side, surrounded by tenements and the smells of pickle brine and baking bialys, the invitation to explore other parts of the city was irresistible. At fifteen cents a ride, the subway was an affordable ticket to adventures the city had to offer a still impressionable child.

It was a different era. A parental directive that today might result in a visit from the child welfare department was, back then, a reasonable invitation to a child to explore one of the most vibrant cities in the world. While my peers were off to ballgames at Yankee Stadium or movies at Radio City Music Hall, I found myself gravitating to very different venues: the used bookstores on 4th Avenue, and the Pierpont Morgan Library and Museum.

“Bookseller’s Row,” as it was called, had a number of musty shops filled with books that ranged from discarded Reader’s Digest condensed books, to old glass cases with leather-bound books that held a particular fascination for me—and smelled distinctly better than the streets of the Lower East Side. One particularly cavernous shop, Schulte’s Bookstore, was a regular stop for me. While purchasing any book of consequence was beyond my financial capacity, I haunted the cases of this shop. One day, as I examined a 1723 copy of The Lord’s Supper by Matthew Henry, (printed in Boston by Samuel Kneeland), in its original leather binding, the owner of Schulte’s came up to me to discuss what was in my hand. “Young man, are you interested in that book?” he asked me. I told him I was, but the $8.00 price was considerably beyond my means. “Well, why don’t you take that book as a gift from the shop, and use it to start your collection,” he responded. I was stunned, but did not decline the gift. And at that moment my passion as a collector began in earnest.

The other regular haunt was the Pierpont Morgan Library on Madison Avenue and 36th Street. I considered the room that housed the library’s treasures to be one of the most magical spaces I had ever seen, and I still do. My visits became so regular that the staff no doubt took amusement at the little boy who couldn’t stay away, and one of the curators eventually reached out to ask me if I would like a personal tour behind the scenes at the library. Despite the expectations of hushed tones inside a library,
I’m not sure I did a very good job of containing my excitement. Again—a moment in a child’s life that would have an impact far beyond what a kind librarian might have imagined.

It was at the Morgan that my fascination with early printed books was born—and specifically *incunabula,* books printed between about 1455 and 1500. This wasn’t just because they always had one of their (three!) copies of the Gutenberg Bible out for display. Rather, as I learned more and more about the art, craft, and impact of early printed books, I became fascinated by the revolutionary impact that this technological invention had on the shape and direction of western civilization. In many ways, printing was a central feature of the era that laid the foundation for the Renaissance, the religious reformations, and the development of the modern world. Even so, for the boy who pushed his face up to the glass of the display cases at the Morgan, it would be years before I was able to truly comprehend just how significant the printing press was in shaping the religious, scientific, and political realities of the modern era.

My parents were both trade union leaders, and my allowance was in the vicinity of fifty cents or so a week. The possibility of ever actually owning an early printed book never crossed my mind. They were, to me, something that I could look at in a museum case, imagining who might have owned the book over the five centuries of its life, and whose thinking and actions it influenced in both productive and nefarious fashions. But access to these early printed books—the opportunity to experience their form, contents, and significance—remained a fascination that confirmed me in the ranks of what the Morgan’s librarians must have agreed was one odd little boy.

As I grew up, my attraction to Haverford College became rooted in many different features of this extraordinary institution. During the Vietnam era, I was actively engaged in opposing the war. I volunteered at the American Friends Service Committee in New York City filing records created by the draft counselors who were helping young men build their cases to be conscientious objectors to military service. As a student at Friends Seminary next door to the AFSC, I learned more about Quakers and Quakerism, and was drawn to the spiritual motivations that grounded the principles of nonviolent resistance to injustice and war. Haverford was a natural choice for me.

For four years, the Christopher Morley Alcove in the Magill Library was where I spent almost as much time as my dorm rooms. The large leather sofa there was perfect for reading—and napping. I discovered that the William Pyle Philips Collection, which contains some spectacularly rare and important books, was given to the College with the explicit condition that the books be made available to students on request to assist them in their studies. While most institutional libraries severely restricted access to their rarest volumes, Haverford was a place where these books were considered integral to a student’s educational experience. I recall visiting the Special Collections as a freshman in Bruce Partridge’s Introduction to Astronomy class, and asking to view the first edition of Nicolaus Copernicus’ *De revolutionibus orbium coelestium* (Nuremberg, 1543), to experience the first printed depiction of the heliocentric solar system. I was over the moon.

I was also fascinated by the richness of the Quaker Collection, and was able to explore the early pamphlets and tracts by some of the earliest Friends that confirmed for me both their distinct oddness and their passion for justice. *The Devil*
Was and Is The Old Informer Against the Righteous, an intense and vindictive 1682 tract by George Fox, was a particularly wonderful example of the bizarre intensity of the earliest Quakers.

After leaving Haverford, I obtained master’s degrees in both divinity and social work, and returned to New York City to become involved in the emerging network of non-profit organizations that were serving the increasingly visible and vocal lesbian and gay communities in the city. I became the Executive Director of the New York City Gay and Lesbian Anti-Violence Project, which works to define the issues of bias-related violence, and provide mental health crisis services to the traumatized survivors of these assaults. While my passion for old books continued, my income was incompatible with collecting anything of real value, and the intensity of my work took me away from this world for a time, especially as the AIDS crisis hit with a vengeance, and after work hours were spent visiting dying friends.

It wasn’t until I had burned out in my work and left New York and moved to Seattle that I was able to rekindle my interest in early printed books. After a ten-year stint in human services in local county government, I launched a consulting firm to offer assistance to cities, counties, and states to integrate human service systems and address the challenging social problems facing their communities. This was modestly more lucrative work. With a small bit of disposable income available to me, one night I ventured onto eBay and entered a search word: “incunabula.” I was suddenly that eleven-year-old boy again, staring into the cases at the Morgan Library. But this time, there were books that weren’t trapped behind the glass of their cases. I told myself that I would allow myself the luxury of purchasing just one of these treasures, and justified my decision by purchasing a 1496 edition of the Regula Pastoralis, by Pope Gregory I. This book, originally written around 590 AD, is arguably one of the first Western treatises about providing mental health assistance, albeit within the strictures of a rigid Christian tradition. With the acquisition of an early example of an instructional text for mental health professionals, I could satisfy my childhood desire to have an early printed book on my shelf.

As other collectors will immediately recognize, that rationalization didn’t last very long, and that first purchase proved to be a slippery slope. As my budget allowed, I decided to add additional incunabula to my collection. I did, however, establish criteria which, along with my modest budget, helped me to define the types of books that I sought to add to the collection. Those criteria were:

1) The book is in good condition for its age;
2) The book is complete, or if not complete, is missing no significant pages;
3) The contents of the book have some historical significance, and the book has had an impact on civic, political, or religious discourse over the ages;
4) The book is still in print today.

Admittedly, I did not hit all four criteria with each purchase. The fourth criteria was the hardest to maintain on a continuing basis. I also worked to balance secular and religious texts—something of a challenge given that about 90% of what was printed in the fifteenth century was a theological work of some type. Nevertheless, over time I was able to assemble a collection of more than fifty early printed books that represented a variety of topics, authors, printers, and bindings.

My husband, Paul, was generous in his tolerance of my collecting habit, and the space and storage requirements these books required in our home.
With a wry smile, he would refer to my obsession as “David’s porn collection,” describing the hours spent surfing the internet seduced by pictures of old tomes, how my hands would tremble as a new package arrived to be opened, and how I would often pour over my books late into the evening with a fascination and focus that others might reserve for more illicit publications.

As I collected and studied the books I was acquiring, I also read more widely about the significance and impacts of printed texts, and increased my appreciation for at least three distinct areas in which the arrival of moveable type and the rapidly increasing availability of printed books significantly transformed the Western world:

1) An increase in access to available knowledge: Although the utility of books was constrained to those who were able to obtain and read them, the arrival of the printing press resulted in a steady increase in the number of individuals and institutions with access to more than just oral traditions or the advice and counsel of a priest or civic leader. In a very real way, printed books encouraged those who could access them to think for themselves, rather than rely on oral traditions and indoctrination by those who, previously, had strictly controlled access to much scarcer written manuscripts.

2) A shift in how people think about their lives, their contexts, and the world around them: The arrival of the printed book opened doorways to information that had previously been inaccessible to the majority of the residents of what today we call Western Europe. The impact of this information was transformational, and helped to energize and accelerate the emergence of diversity in political, historical, religious, and social thinking and action that started and continues to transform the world as we know and experience it.

3) Support for catapulting the Western world into the modern era: The printing press set in motion an intellectual and social revolution that irrevocably shifted the course of history. It ensured dissemination of information about the age of “discovery” of worlds previously unknown to Western explorers, and allowed for widespread distribution of propaganda that shaped how the emerging Renaissance could both define and exploit the resources of the lands and people far beyond European shores. Within Europe, the Protestant Reformation, and the emergence of Quakerism, would likely have been much more difficult without the printing press and widespread access to alternative theological formulations.

Writing of the significance of the emergence of movable type in the West, John Man summarized concisely the impact of printed books in his insightful treatise, *The Gutenberg Revolution*. While there is not universal consensus on the ways in which the emergence of printed books impacted life immediately in the fifteenth century, Man does suggest that the impact of movable type over time forever shifted the course of history in the West:

Hardly an aspect of life remained untouched. If rulers could bind their subjects better, with taxes and standardized laws, subjects now had a lever with which to organize revolts. Scholars could compare findings, stand on each other’s shoulders and make better and faster sense of the universe. Gutenberg’s invention made the soil from which spring modern history, science, popular literature, the emergence of the nation-state, so much of everything by which we define modernity.
My armchair studies of the impact of the invention of printing also have helped to inform my contemplation of other significant technological advances. From my perspective, the invention of the personal computer and the emergence of the World Wide Web are, perhaps, the two most significant technological advances since the invention of movable type. And, as with printed books, I ponder both the anticipated and unanticipated consequences and impacts of this latest technological revolution. With a world of information—both fact and fabrication—at our fingertips, how will this technology both inform our challenging choices about the future that lies ahead, or potentially cloud our decisions with misinformation? As with the printing press, our political, environmental, and social future will no doubt look very different from what the inventors of computers and the internet could ever have imagined, both for better and for worse.

From the outset of my accumulating these books, it was always my intention that they would end up in the Haverford library, with the same accessibility requirement that is attached to the precious books in the Philips Collection. Books are made to be read and put to use and, as one of my favorite rare book dealers admonished me when I expressed concern about excessive handling of a text: “David, these books have been around and in use for more than 500 years. Don’t stop using them now….”

It is my fervent hope that the books I have assembled over time will be frequently accessed by students, faculty, staff, and visitors from a variety of different disciplines—history, science, political science, art, philosophy, language, religion, etc. Whether it’s the copy of Aristotle’s *De Generatione et Corruptione* that is accessed by a philosophy student working to uncover the Islamic influence of a Greek text translated first into Arabic and from that language into Latin, or an art student who wants to see how a fifteenth century carver of woodblock illustrations imagined what an elephant looked like to depict Hannibal crossing the Alps in Livy’s *Deche Vulgare Historiate*, or a sociology student tracing the history of homophobia and heterosexism in Western tradition as reflected in Alain de Lille’s *Doctrinale Altum*, I trust that these books will be put to use to further the educational goals that embody a Haverford education.

The whole idea of a book is that it regularly finds its way into the hands of someone who wants to read it, learn from it, and deepen their insights from what the content of the volume reveals. It has already been a pleasure working with Alexandra Stern (the brilliant student curator of this exhibit), Terry Snyder, Sarah Horowitz, Margaret Schaus, and Bruce Bumbarger from the Library, and historian Darin Hayton. I have even learned more about my books from this knowledgeable group of people than I knew before we started the process of assembling this exhibit.
Notes

Who Created the New and Copied the Old


2) It is nearly impossible to construct a simple narrative of medieval Europe beyond the basic assertion that the region was decentralized. The experience of life for an individual differed dramatically based on region, and even within regions, on an individual’s social status, gender, and religious affiliation. To even use the term “Europe” to describe the disconnected city states, empires, and kingdoms is in part inaccurate, as the term cannot be easily divorced from its modern connotations of an umbrella of shared culture, though it persists in scholarly literature largely due to its convenience.

3) Moveable-type printing was more efficient than xylographic printing for books using alphabetic writing systems, like modern-day Hangul and, eventually, Germanic and Romance languages such as Latin, Italian, German, and English. For writing systems that use characters, however, like written Chinese, creating individual blocks for the 40,000+ characters would be far less efficient than creating individual wood-blocks for each page or image.


8) While the contemporary meaning of the word manuscript has shifted, its medieval definition reflects its translation from Latin, quite literally “written by hand.”


11) Cristina Dondi, Printing Evolution 1450–1500: Fifty Years that Changed Europe, (Venice: Marsilio, 2018), 42, 48. Information regarding the repurposing of individual woodcuts across multiple texts, as well as the economic, social, and artistic implications of these use patterns, has been compiled within the database 15cILLUSTRATION by the University of Oxford as a component of their wide-reaching project on early printing in Europe, 15cBOOKTRADE. The database is available for use online through the University of Oxford.


18) Though manuscripts and printed books generally used different kinds of ink, and the development of ink varieties suitable for printing was a major component of the “invention” of printing by Gutenberg, Fust, and Schöeffer, the goal of the ink (to make a semi-permanent mark on the paper) held constant across the two techniques.


22) Several of these indexical and organizational features were present in both manuscripts and printed books, though their development was extremely slow. Developed features like what we expect to see in a book today would not appear until at least the sixteenth century, sometimes later. For more on the development of indexical features in early printed books, see Ann M. Blair, *Too Much to Know* (New Haven and London: Yale University Press, 2010).

23) Although the contents of the Wertheimer Collection are not necessarily representative of trends in book publication in the fifteenth century, as many of the most popular books printed in this period were used so heavily that they do not survive, it bears mention that fewer than 10% of the books in the collection are contemporary publications, emphasizing the importance of existing texts in the world of early printing. Dondi (2018) estimates that, of the 28,000 surviving editions of incunabula, approximately 16,500 were medieval or classical works, compared to approximately 11,865 contemporary works. While this number of contemporary publications is higher than previous estimates, it is possibly complicated by the implicit bias in looking only at surviving materials.


28) That many editions of classical texts that are still in circulation today were preserved in their current state by scholars in Byzantine Constantinople holds fascinating implications.

29) It is worth noting, however, that the translation of all major Greek works into Latin did not mean that knowledge of Greek dwindled within Europe. Greek grammatical lexicons assisted scholars in learning the language, and the large populations of Greek-speaking immigrants following the fall of Constantinople ensured the continuance of the language as a living practice. For more on the relationship between translation, typological fixity, and language practice, see Elizabeth Eisenstein, *The Printing Revolution in Early Modern Europe* (New York: Cambridge University Press, 2005), 89–91.

30) Of the surviving volume of books produced in the fifteenth century, approximately 4928 are categorized as theology, marking it as the category with the highest number of surviving volumes. For more on the breakdown of surviving volumes by category, see Dondi, *Printing Evolution*, 72–73.

Notes on Becoming a Collector of Fifteenth Century Books

1) Incunabula translates literally from the Latin as “from the cradle” or “swaddling clothes,” a reference to these books as the earliest examples of the use of movable type in the West. The cutoff date of 1500 is entirely arbitrary, but took hold among collectors as the end date for books that receive this designation.

2) When I was in eighth grade, my mother attended a talk by Haverford psychology professor Douglas Heath. Although she never said a word to me about Haverford or my college choices, once I was admitted to Haverford as an early decision candidate, she told me that she had known since attending that lecture that I would end up at the College.


Bibliography


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—Alexandra Stern