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The Risk to Print History in the Late 15th Century

Johann Koelhoff's Chronicle Project in 1499

1 Introduction

In contrast to other media revolutions in history, scholarship has described the 'Gutenberg-revolution' as striking because the invention and dissemination of printing was already perceived as a groundbreaking change by its contemporaries. Today, we know an astonishingly large number and variety of historiographical and encyclopedic texts, letters, poems, dedicatory letters and colophons, even legal opinions, and edicts that reflect the attention and euphoria but also skepticism and objections people in the Middle Ages developed towards the new medium.¹

An example for such a discussion can be found in the *Cronica van der hilliger stat van Coellen*, which will be at the center of the following article. It was published in Cologne in 1499 by Johann Koelhoff the Younger and often is named *Koelhoffsche Chronik* after its publisher.² Almost three full pages of the large leaves tightly packed with printed text describe the development and dissemination of the new technology in detail. In part the information given is even original. Overall, the passage impressively reflects the beneficial effects of printing for humanity in those dark days.³

The anonymous author of the chronicle drew his information from a variety of sources: On the one hand, he seems to have acquired his knowledge by reading other scholarly works. He explicitly recommends two books regarding writing and written

1 For a survey of the key arguments of this debate and an introduction to this scholarship cf. Meyer-Schlenkrich 2018, chapter B.3. For a collection of such texts cf. Widmann 1973; Widmann 1977; Mertens 1983, 83–95; Giesecke 1991, 124–207, 476–488. The most recent study mostly with examples from Italy for the earliest period is Eisenstein 2011, 4–33.

2 An introduction to the chronicle and a recent survey of editions and scholarship can be found in Hanauska 2014, 347–356. For a continuously updated online bibliography cf. Bayerische Akademie der Wissenschaften 2021.

3 The headline of the relevant passage already summarizes this very clearly: *Wanne. Wae ind durch wen is vonde[n] dye vnyvssprechlich kunst boicher tzo drucken, Kölnische Chronik 1499 (GW 6688), fol. CCCXiv to CCCXIIv. The references in this article follow the copy ULB Münster, Inc 173, and the original printed foliation. For a summary and partial German translation of the chapter, cf. Geldner 1975, 441–456, Buschinger 2007, 477–478. Information considered new and innovative by scholars are the anonymous author's remarks that the first printed book from Gutenberg's workshop in Mainz was a *Bybel zo latijn* printed with type later used for liturgical prints or that Donat editions printed with woodblocks in the Netherlands were models for his invention. Cf. Schlechter 2005, 70–71.*

culture.⁴ On the other hand, he conducted oral inquiries. One of his sources, which he explicitly mentions, was Ulrich Zell, ‘the honorable master of the art of printing’ (*d[er] Eirsame man Meyster Vlrich tzell*). Zell is introduced as the one to have brought this art to Cologne, and ‘in the year 1499’ (*zertzit, anno MCCCCXCIX*), when the author inquired with him, he still ran his workshop.⁵ Through Zell it was possible for the anonymous author to place the metropolis on the Rhine into a distinguished position in printing history. He accurately asserts that the first among the printers had been a Strasbourg-born citizen with the name *joncker Johan Gudenburch*. However, the chronicle argues – not quite correctly from today’s perspective⁶ – that the new art had made its way ‘first’ to Cologne (*alre eyrst*), even before it arrived in Strasbourg or Venice.⁷

At a first glance, pride in Cologne seems to have been the reason for a full chapter of the chronicle on the recent invention of printing with movable type. In fact, the book considered itself as *Cronica van der hilliger Stat van Coellen* (‘a chronicle of the holy city of Cologne’), as it states on the first page.⁸ It explicitly wanted to narrate the city’s history, and modern scholarship describes it as the climax and completion of Cologne’s medieval vernacular historiography.⁹ Nevertheless, the author’s scope did not end at the city’s walls: The events of Cologne’s history are not only embedded in a history of the archbishopric of Cologne and the *duytsche[n] landen* (‘German lands’) but also in a universal framework of history that begins with the biblical story of Genesis.¹⁰

Therefore, at a second glance, the author’s observations regarding the introduction of printing seem far less patriotic, and also the local significance does not seem to be his decisive argument. Moreover, and the headline of the paragraph already indicates this, the ‘unspeakable’ (*unuyssprechlich*) benefits of this new art for mankind,

⁴ The author recommends two books with the same title, *De laude scriptorium*, one written by the *groiss beroempte[n] Doctoior* Johannes Gerson, who, however, had died before the introduction of printing. The other work mentioned was written by the Benedictine abbot of Sponheim Johannes Trithemius in 1492 and printed for the first time in 1494. Opposed to the author of the chronicle, Trithemius mainly criticizes the new technology. Cf. *Kölnische Chronik* 1499 (GW 6688), fol. CCCXIV; Herweg 2010, 391–477.

⁵ *Dat begynne ind vortganck der vurß kunst hait myr mu[n]tlich vertzelt d[er] Eirsame man Meyster Vlrich tzell va[n] Hanauwe. boichdrucker zo Coelle[n] noch zertzijt. anno MCCCCxcix. durch den die kunst vurß is zo Coelle[n] kome[n].* *Kölnische Chronik* 1499 (GW 6688), fol. CCCXIIr. Cf. Corsten 2007 for Ulrich Zell.

⁶ Cf. Schmitz 2018, 358 for the spread of the new technology; cf. Rautenberg 1996, 7–10 for Cologne’s print workshops.

⁷ *Kölnische Chronik* 1499 (GW 6688), fol. CCCXIIr.

⁸ Cf. *Kölnische Chronik* 1499 (GW 6688), title page without foliation.

⁹ Cf. Beckers 1985, 7.

¹⁰ Cf. the subtitle of the chronicle, *Kölnische Chronik* 1499 (GW 6688), fol. IIr, which underscores that the book wanted to be a *tzytboich* that reports *van den geschichten der vergangen Jairen in duytschen landen und sunderlinge der heiliger Stat Coellen und yrer busschove*. The edition, prepared by Herman Cardauns in the 19th century, unfortunately picked out solely the parts of the chronicle concerning the history of Cologne so that according to Anna-Dorothee von den Brincken 1984, 68, it gives a wrong impression of the text. Following her estimation, only about 11 % of the text specifically regards Cologne’s history. Cf. Von den Brincken 2001, 88; Henn 1987, 232–236.

especially for all ‘good Christians’ (*goide[n] Criste[n] mynschen*) and their salvation, are at the center of his attention. According to the chronicle, God himself gifted printing with movable type to mankind in his unfathomable wisdom enabling all to find the path to beatitude by reading him- or herself (*selffs lesen*) or by listening to reading (*hoeren lesen*). The text continues to suggest that the new art of printing enriched and enlightened scholars with knowledge of Latin, nuns, and monks, but also lay people who read German or let it be read to them, and in this way soon the path to beatitude would be known to all mankind. The author’s text is permeated by the belief that only reading makes one mature and that printing finally makes it possible for everyone to ‘cultivate the field of their reasoning’ (*dat sij den acker yrs verstantz moege[n] plantze[n] vn[n] beseen*).¹¹

The anonymous author’s judgment regarding printing with movable type is exclusively positive, although he obviously knew critical assessments and also mentioned them. And he goes even further in his argument: For him, it is apparent and undeniable that books produced by printers are significantly better than the previous hand copied volumes (*vnghelijch besser [...], dan vur mails gewest geschreuen*).¹² This brings us to the center of this volume’s topic: What are the reasons for the author’s assessment? Can this opinion be traced in the production process of the chronicle and its transmission thereafter?

Based on his clear judgment, it is unsurprising that the author of the chronicle did not circulate his book in handwritten copies but rather wanted it to be printed. The transmission history clearly indicates that the chronicle was compiled solely to be printed.¹³ Handwritten copies of Koelhoff’s Chronicle are only known to us as later transcriptions of parts of the printed edition.¹⁴ However, today, not even a setting copy exists that must have been used by the typesetter(s). Compared with other examples this is quite remarkable: The *Straßburger Chronik* of Jacob Twinger von Königshofen, which the anonymous author consulted and explicitly cites, for instance was copied in handwriting numerous times before it was printed in Augsburg.¹⁵

¹¹ *Kölnische Chronik* 1499 (GW 6688), fol. CCCXIV, CCCXIIr.

¹² *Kölnische Chronik* 1499 (GW 6688), fol. CCCXIIv.

¹³ Interestingly, many scholars write that the chronicle was the first vernacular chronicle to be printed. Cf. for example Buschinger 2007, 465.

¹⁴ Only one substantially shortened copy from 1526 is explicitly known to scholarship (*Clein cronica van Coellen*). According to Beckers 1985, 9 the text of this manuscript is narrowed down to the events concerning Cologne and augmented by events up until the year 1526. In part, the views of the chronicle’s author are criticized and polemicized. According to Max Plassmann, whom we thank very much for this information, further copies can be found in the Historisches Archiv der Stadt Köln. This corresponds with the observation of Hermann Cardauns in the late 19th century that a variety of partial copies, especially concerning the unrests and conflicts of 1396 and 1481, could be found in Cologne. Cf. Cardauns 1876, 248.

¹⁵ For the differences between the multiple editions of Twinger’s Chronicle see in detail Serif 2020, see particularly 79 for the printed versions. According to Ina Serif, the printer’s workshop in Augsburg

Instead, a stunning number of copies of the printed edition of Koelhoff's Chronicle survived: In total at least 240 pieces, some of them fragments, are held by libraries and public institutions across the globe. According to the *Gesamtkatalog der Wiegendrucke* and *Incunabula Short Title Catalogue* they are held by 172 institutions in 23 countries. Besides Germany these are Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, France, Hungary, Japan, the Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russia, Slovakia, Sweden, Switzerland, the United Kingdom, the United States, and Vatican City.¹⁶ In addition, we know about further privately-owned copies.¹⁷ Only recently, a family from Cologne offered an illuminated copy to the municipal history museum of Cologne for sale.

Despite this extraordinarily high number of extant copies, many scholars assume that the initiators of Koelhoff's Chronicle were not rewarded for their courage and their entrepreneurial risk. It is widely discussed whether Koelhoff's Chronicle was a 'great miscalculation' for its publisher, due to him overestimating the sales market for such a vernacular book, or to what extent this (claimed) failure was caused by censorship measures of the authorities in Cologne. This is the reason for us to critically review the scholarship we have gathered so far about the origin and reception of the chronicle and to supplement it with our own observations regarding the materiality of this incunable, gained through the autopsy of a total of 25 original or digitized copies.¹⁸

In order to take a closer look at our case study in an apparently precarious transitional phase between 'manuscript' and 'print culture', the following questions should guide us: Why was a chronicle of the city of Cologne in the 1490s printed in the vernacular? What do we know about the recipients and how they perceived the chronicle? How did the production of such a voluminous book work? What difficulties did the producers face that can be regarded as new compared to manuscript production? To what extent does the printing process in general differ from the requirements and conditions of modern printing? In short, must manuscript and print in the 15th century be understood as oppositions, or are they not rather gradual transitions? What was reminiscent of the process of manuscript production and where did innovations occur?

We want to approach these topics on a praxeological level. Therefore, we will follow the different actors involved in the printing and reception process of the chronicle and ask how we can imagine their actions and to what extent these can be evaluated from a modern perspective as 'still' belonging to the manuscript culture or as 'already'

thought that only the more universal parts of the Twinger's Chronicle would sell well and omitted the parts regarding Strasbourg's city and diocesan history.

¹⁶ Cf. ISTC ic00476000 and GW 6688 (accessed 19/04/2023). We want to thank Falk Eisermann for reviewing and updating the holdings in the GW.

¹⁷ In a newspaper article from 2013 (Kreikebaum 2013) the art dealer Karl Schmidt of Cologne estimated that ten to 20 copies were owned privately—one by himself—without providing a source for his knowledge.

¹⁸ A list of these copies can be found at the end of this article.

belonging to the printing age. The first chapter will focus on the anonymous author of Koelhoff's Chronicle and his attitude towards printed literature. In the second chapter, we will look at the printer Johann Koelhoff as the initiator of the project, while in a third section the anonymous typesetters, printers, and wood cutters of the chronicle and the complex process of creating the book in the first half of the year 1499 will be examined. The fourth and fifth chapters will analyze the recipients and readers of Koelhoff's Chronicle: A first section will deal with the authorities in Cologne and the censorship efforts attributed to them by modern scholarship. The last chapter will deal with the chronicle's readers and their (handwritten) 'traces of reception' that have come down to us in the extant copies of the printed edition.

2 The Anonymous Author of Koelhoff's Chronicle

Although he frequently referenced himself in the first person singular in his text, the chronicle's author does not reveal his name to the readers. This led to speculation about his identity early on: Soon enough, the author was suspected to be a cleric who wanted to remain anonymous in order to expose and denounce grievances within the clergy with the impetus of a reform theologian (as is also expressed in the passage on printing paraphrased at the beginning of this article).¹⁹ Scholars associated him with various mendicant orders: In the 16th century the author was assumed to have been a Dominican friar from Cologne.²⁰ In 1982, Severin Corsten suggested that the author might have been a member of the Order of Saint Augustine. Their monastery was in the street *Große Sandkaul* close to the printing workshop that was located in the so-called house *Rijle*.²¹ Wolfgang Schmitz, however, contradicted this hypothesis in 2020. Instead, for good reasons, he suggested the Cologne branch of the Carthusian Order, founded in 1334, as the origin of the work.²²

Regarding the content, the Cologne Carthusians probably had a great interest in the city's history because the order's founder Bruno was native to Cologne.²³ Schmitz also highlights that in Koelhoff's Chronicle, the history of the Carthusian Order and especially St. Bruno are comprehensively covered. In particular, compared to the *Agrippina* of Heinrich van Beeck, which had functioned as one of the main sources,

¹⁹ Cf. Beckers 1985, 9; Schmitz 2020, 199; Cardauns 1876, 244–245; Geldner 1968, 103; Corsten ²1995, 263–264.

²⁰ Corsten 1982, 39–40 summarizes such quotes. Two names suggested to be the author in the early modern period are discussed by Cardauns 1876, 211–212.

²¹ Cf. Corsten 1982, 41–42; Buschinger 2007, 475, 477 follows this assumption.

²² Cf. Schmitz 2020, 199–200.

²³ Cf. recent research and teaching projects by Sita Steckel at the University of Münster. First findings and the progress of the student's edition of the manuscript Münster, ULB, Cod. 51 can be found here: Steckel 2021.

these topics receive more attention.²⁴ Second, the Charterhouse of St. Barbara should be mentioned as a place where numerous works of critical, committed theologians were collected and which was open to issues of monastic and church reform.²⁵

In addition, Schmitz argues that the Carthusians, who were devoted to taciturnity, were particularly famous for cultivating the written word, i. e., for their learning from books and their libraries.²⁶ This was especially true for the Charterhouse in Cologne, whose members did not just develop great literary impact according to Schmitz²⁷ but also—as already recorded by contemporaries—owned the largest library among the city's countless monastic book collections.²⁸ Of interest for our case study is the fact that they also had a special relationship with the new art of printing, as the library of St. Barbara impressively shows.²⁹

In the 15th century, its book collection experienced a fateful event. In 1451, it was largely destroyed in a great fire; but in the following 30 or 40 years, both the convent and wealthy donors from Cologne put great diligence and money into its swift reconstruction.³⁰ According to Joachim Vennebusch, around the turn of the century the library again held about 500 volumes.³¹ Regarding the manuscripts written for it, James Hogg prepared a comprehensive monograph on more than 200 pieces, bought or gifted to it, which today are scattered all over the world.³² However, Hogg's study does not analyze the numerous incunables that were acquired in addition to the manuscripts.³³ Therefore, it remains to be proven in more detail whether exactly those titles

24 Cf. Schmitz 2020, 201–203 provides a comparison of the passages. Even if the author of Koelhoff's *Chronicle* did not phrase this information himself but copied it from Schedel's *World Chronicle* of 1493, it nevertheless remains striking that he emphasized St. Bruno's role in a stronger way and overall increased the praise already applied there. Schmitz concludes that the Carthusian Order finds stronger appreciation in Koelhoff's *Chronicle* than the other orders in Cologne.

25 Cf. Vennebusch 1978, 83–84.

26 On the special appreciation of books by the Carthusians with numerous quotes from corresponding written sources cf. Lehmann 1960 and with special focus on Cologne cf. Vennebusch 1978, 77–78.

27 Schmitz 2020, 200. Cf. Marks 1974, vol. 1, ch. II, VI; Vennebusch 1978, 84–93 (with a focus on authors of the 16th century but also medieval authors like Rolevinck).

28 Cf. Kammann 2010, 222.

29 The printing activities of the Cologne Carthusians are well researched for the 16th century when they even printed in their own rooms for a few years and commissioned several printed books, especially under the prior Peter Blomevenna, including a 35-volume edition of the works of the Carthusian Dionysius Rijkel. Cf. Chaix 1988, 93–105; Kammann 2010, 227–232; Corsten 1970, 128–137.

30 Cf. Marks 1974, vol. 1, 1–23; Vennebusch 1978, 78–84; Schmitz 1995, 107–110; Wagner 1991, 37–39. Without new findings Kammann 2010, 221–227.

31 Cf. Vennebusch 1978, 79–80.

32 Cf. Hogg 1974. For a selection of important manuscripts from the Charterhouse cf. Wagner/Bock 1991, 146–153, Nr. 4.11–28. On reasons for the dispersion of the collection after 1794 cf. Vennebusch 1978, 102–103; Rautenberg 1996, 145.

33 Buchholz 1957 records numerous books from the library of the Charterhouse of St. Barbara that have been preserved within the University and City Library of Cologne, among them about 100

that the author of Koelhoff's Chronicle used as sources were perhaps available in that library as printed copies.

In an article from 2001 focused on the works of universal history shaping Koelhoff's Chronicle, Anna-Dorothee von den Brincken listed an astonishing number of 18 historiographical works that could have been available to the author in print at the time he wrote his text in the 1490s. Among these were ancient authors like Orosius or Jerome, high medieval chroniclers such as Burchard of Ursperg or Vincent of Beauvais as well as contemporary authors such as the goldsmith Konrad Botho from Brunswick or the physician Heinrich Steinhöwel of Ulm.³⁴ Von den Brincken therefore assesses the research conditions for our author to be much more favorable in comparison to those for older histories of the city, especially the *Agrippina* of Heinrich van Beeck, which presumably had been written between 1469 and 1472. She determines that precisely in the 1470s printers discovered historiography as an addition to their printing programs after theological and religious writings.³⁵

However, in print these works were not only more accessible to future chroniclers. Obviously, they also served as a stimulus and incentive to reproduce other texts not only by hand. Various models for Koelhoff's Chronicle have been discussed in scholarship so far. Particularly striking are the significant similarities with the so-called *Schedelsche Weltchronik*, which was printed by Anton Koberger in Nuremberg a few years prior to the production of Koelhoff's Chronicle in 1493. According to Hermann Cardauns, our chronicle author probably did not use it in the vernacular, but in the Latin edition. To what extent he consulted it is difficult to estimate, because Hartmann Schedel had himself copied many corresponding passages from the *Supplementum chronicarum* of Giacomo Filippo Foresti from Bergamo, which had already been in print since 1483 and was reprinted several times thereafter.³⁶ Both predecessors share, as von den Brincken has put it, an 'unusual interest in cities in general and their individual beginnings'. The printers—themselves part of the urban sphere—she continues, must have 'expected this peculiarity to be of special interest to buyers'.³⁷

Nevertheless, Christoph Reske's survey on the materiality of Koelhoff's Chronicle indicates that the Nuremberg edition of the *Schedelsche Weltchronik* was no direct model for Koelhoff's project: Regarding the format and dimensions, Schedel's work was twice the size of Koelhoff's Chronicle, and also the typefaces chosen in Nuremberg and in Cologne show no similarities. Instead, looking both at the size and the typeface of the main text body, the *Cronecken der Sassen* ('Chronicle of the Saxons') printed in Mainz in 1492 by Peter Schöffer might have rather served as a template. This

incunables, but unfortunately without naming the titles. Furthermore, the study does not indicate if they were acquired in the 15th century or at a later point in time.

³⁴ Cf. Von den Brincken 2001, 80–81; Von den Brincken 1984, 68. See also Cardauns 1876, 214–237.

³⁵ Cf. Von den Brincken 2001, 80; Von den Brincken 1987.

³⁶ Cf. Cardauns 1876, 222–223.

³⁷ Cf. Von den Brincken 1984, 68.

applies all the more as, unlike the *Schedelsche Weltchronik*, the ‘Chronicle of the Saxons’ is explicitly mentioned by the anonymous author in the preface as part of a literature overview on fol. IIIv. At the same time, it is also linguistically closer to Koelhoff’s Chronicle through the choice of Low German.³⁸ Finally, Reske also highlights the close personal ties between Cologne and Mainz, since the above-mentioned printer Ulrich Zell, with whom not only the author but also the Koelhoff family were on close terms with, had learned his trade from Peter Schöffer in Mainz.³⁹

Let us, however, focus on the networks that did not originate from the printer but from the author of Koelhoff’s Chronicle. The most prominent figure is Werner Rolevinck, who from his entry into the Charterhouse in 1447 until his death in 1502 was undoubtedly one of the formative figures in the Cologne branch of the order. As a writer he was as productive as he was widely recognized.⁴⁰ Not only his autographs from the holdings of the monastery’s library bear witness to his work. Moreover, Rolevinck is considered to be the first author in Cologne to write directly for publication in print.⁴¹ From his oeuvre, undoubtedly the *Fasciculus temporum* is especially noteworthy. In the first decade of its printing history from 1473/1474 onwards, this concise annalistic treatment of world history was published in ten editions by seven different printers in four cities—Cologne, Leuven, Speyer, and Venice—and is therefore counted among the bestsellers of early printing.⁴² And even more of his works found their way into print. The first editions were produced in Cologne without exception. In addition to the *Fasciculus*, Rolevinck’s preferred printer Arnold ter Hoernen alone produced another 13 of his books.⁴³

Rolevinck and the unknown author of Koelhoff’s Chronicle shared their thoroughly positive attitude towards printing and its new possibilities of text distribution. Schmitz convincingly showed this with quotations from Rolevinck’s *Sermo de praesentatione beatae Mariae virginis*, printed by ter Hoernen in 1470, and from the *Fasciculus temporum*, which recorded the invention of printing as an event in world history.⁴⁴

³⁸ Cf. Reske 2001, 110–112; Cardauns 1876, 225.

³⁹ Concerning the relationship between Zell and the Koelhoff family cf. Rautenberg 1996, 55, 258, 261, 266; Reske 2001, 112. Reske points out that Severin Corsten suspected that Zell might have worked for Koelhoff the Younger as an employee while Wolfgang Schmitz argues for them being business partners.

⁴⁰ Cf. Johanek 1998, 8; Colberg 1992, 153–158.

⁴¹ Cf. Lülfiing 1972, 356–357 and prominently mentioned by Eisenstein 1978, 316 who mistakenly identifies Rolevinck as prior of the charterhouse.

⁴² For the editions prior to 1480, cf. Stillwell 1924, 420. The first dated edition is: Rolevinck, *Fasciculus temporum* 1474 (GW M38693). Possibly earlier: Rolevinck, *Fasciculus temporum* [around 1473] (GW M38682). For further editions see GW M38671–M38760.

⁴³ Some of the titles were produced more than once, cf. GW M38668, M38692, M38693, M38823, M38766, M38767, M38769, M38824, M38774, M38775, M38777, M38779, M38810, M38811, M38815, M38816, M38780, M38781, M38782, M38783 and M38789. See Lülfiing 1972, 356–357; Schmitz 2020, 200–201. Schmitz 2018, 165 describes Rolevinck as a kind of in-house author for Arnold ter Hoernen’s workshop.

⁴⁴ Cf. Schmitz 2000, 204–205.

However, this is by far not the only connection between the two: First, the *Fasciculus temporum* is frequently cited in Koelhoff's Chronicle and also explicitly mentioned by the author.⁴⁵ Second, both met in person. The author mentions Rolevinck in the important question of Cologne's origins as a source for orally obtained information.⁴⁶ According to Schmitz, such a direct contact could only have taken place in the Charterhouse itself, due to the strict rules of the Carthusian Order.⁴⁷

Perhaps this also was the occasion on which Rolevinck gave the anonymous author of Koelhoff's Chronicle four woodcuts from his *Fasciculus* edition, which had apparently no longer been used after the end of Arnold ter Hoernen's workshop around 1483.⁴⁸ It is quite plausible that the author of the *Fasciculus* had taken them into safe-keeping, as Schmitz assumes. Overall, close and practical relationships between the Charterhouse and the printer can be found. For example, ter Hoernen diligently followed handwritten models for the types he used, which, according to Hans Lülfiing, he could have found among the Brethren of the Common Life in the monastery of Weidenbach or in the Charterhouse of St. Barbara.⁴⁹ For Werner Rolevinck, too, it can be reconstructed that he had an active role in the printing of his works and intervened in the typesetting process himself. This can be traced in the production of his *Paradisus conscientiae*, for which the master copy written by the author was preserved, as well as in his famous *Fasciculus temporum*.⁵⁰

The anonymous author could therefore have followed Rolevinck as a model and thus specifically expedited the printing of his chronicle. In doing so, he was of course aware that he was breaking new ground with regard to the parts of the chronicle concerning Cologne: For them, with a few exceptions, only handwritten sources can be found.⁵¹ This is especially true for a major work that the author frequently consulted, the above mentioned *Agrippina* by Heinrich van Beeck, which today is preserved in

⁴⁵ Cf. Schmitz 2020, 203–204.

⁴⁶ *Kölnische Chronik* 1499 (GW 6688), fol. XXXVr: *der geystliche ind andechtige vader Wernerus eyn broder van der Carthuser orden in Coellen. der ouch gemacht hait eyne boich van den geschichten der tzeit. ind ist genoempt vp latynsch Fasciculum temporum Vp duytsch Dat gebuntgyn der tzeiten. Vnd ich hayn muntlich van ym gehoyrt van der anheynunge der Stat Coellen dan he beschreyen hait in dem vorschreyen boiche.*

⁴⁷ Cf. Schmitz 2000, 204.

⁴⁸ Rolevinck, *Fasciculus temporum* 1474 (GW M38693). Cf. Reske 2001, 104; Schmitz 2020, 206. The woodcuts can be found in Schramm 1924, 5, plates 20–21, No. 86 *Turm zu Basel* (*Kölnische Chronik* 1499 (GW 6688), fol. XVr), 88 *Stadtansicht* (*Kölnische Chronik* 1499 (GW 6688), fol. XVIIr), 89 *Stadtansicht Rom* (*Kölnische Chronik* 1499 (GW 6688), fol. CXL v), 92 *Stadtansicht Köln* (*Kölnische Chronik* 1499 (GW 6688), fol. CXL v).

⁴⁹ Cf. Lülfiing 1972, 356–357.

⁵⁰ Cf. Schmitz 2000, 204. For the production of the *Paradisus conscientiae* cf. Marks 1977. See also Mertens 1983, 109 for Rolevinck's complaints about the first printed edition of his *Westfalenbuch*, which he disliked so much that he would have preferred seeing it destroyed rather than published.

⁵¹ Cf. Cardauns 1876, 226–233. One of the few exceptions was Christian Wierstraet's *Reimchronik* on the siege of Neuss, see more below in this chapter.

seven manuscripts, among them the autograph and also three from the time after 1499 when Koelhoff's Chronicle was published.⁵² The printed chronicle thus made Heinrich van Beeck's text, originally intended for a small circle of families close to the city council, accessible to a wider audience, at least in large passages. Bearing this in mind, one could assume that the lost print master of Koelhoff's Chronicle is at least preserved in parts in the manuscript B of the *Agrippina* used by the author according to Cardauns (a direct copy of the autograph by various hands and corrected by Heinrich van Beeck himself).⁵³ This is all the more likely since our author and printer drew from it not only for the written content but also for the illustrations.⁵⁴ The most obvious connection is the image of the Quaternion Eagle (*Quaternionenadler*) extending over a bifolio, which at the same time is one of the most spectacular woodcuts of the chronicle.⁵⁵

3 The Printer Johann Koelhoff the Younger

Since the author is unknown, Koelhoff's Chronicle is usually named after its printer in modern scholarship. Proudly he names himself in the colophon dated August 23, 1499.⁵⁶ Indeed, the initiative for this ambitious printing project, according to Wolfgang Schmitz, must be attributed to him, even if his other print jobs in the decade between 1491 and 1502 are rather characterized by small works or print commissions.⁵⁷ Scholarship has judged him rather negatively: The reasons given for this are on the one hand his dependence on his father of the same name, whose workshop and utensils he inherited in 1493 and also used for his large chronicle project. On the other hand, it is often stated in this context that he is also documented in other businesses, including cattle trade, which suggests—at least between the lines—that he was only more or less a dilettante occasional printer. This judgment is most sharply expressed in a publication by Heinz Finger, who describes Koelhoff the Younger as an outsider among the printers in Cologne of his time. In particular Finger assesses the chronicle project as an entrepreneurial 'failure', since Koelhoff would have underestimated the necessary

⁵² Cf. Hanauska 2014, 283–297.

⁵³ Cf. Cardauns 1876, 231. For the *Agrippina* as source of Koelhoff's Chronicle cf. Cardauns 1876, 226–231.

⁵⁴ Cf. Corsten 1982, 20 who lists out the woodcuts that were inspired by the *Agrippina*. See also Reske 2001, 104.

⁵⁵ Cf. Schramm 1924, plate 174, Nr. 794. The other illustrations that were inspired by the *Agrippina* are listed in Schramm 1924, Nr. 754, 757, 758, 762, 797, 799.

⁵⁶ For Koelhoff cf. Voulliéme 1903/1978, LXV–LXIX with a list of his 27 printed works between 1493 and 1500 on page CXXX.

⁵⁷ Cf. Schmitz 1990, 320–329. For more information concerning both father and son Johann Koelhoff cf. Geldner 1968, 103; Corsten ²1995, 263–264.

initial investment and would not have met the market requirements, leading him into 'financial misery'.⁵⁸

Let us take a closer look at what contemporary information regarding the genesis of the work forms the basis of this judgment. By analyzing circumstantial evidence within the text of the chronicle, Severin Corsten has shown that Johann Koelhoff the Younger probably began the production in January or February 1499.⁵⁹ According to a contract transmitted in administrative records only a few weeks later, on March 22, 1499, Koelhoff sold his house — called *Rijle*, located in the parish of St. Alban and which he had acquired only in 1496 — to the wealthy merchant Jakob Pastoir and his wife Gertrud. Presumably, however, he thereafter rented it from the affluent couple, so that he probably continued to use it as a residence and for his workshop.⁶⁰ Subsequently, Koelhoff's Chronicle was most likely completed there in August 1499. This house sale, however, is the reason for the assumptions that Koelhoff had gone bankrupt.⁶¹

Indeed, the investment must have represented a considerable risk at the beginning of this enterprise. At least, Koelhoff the Younger did not have to produce any new type for this project, since he was able to use existing cast letters from his father for all three typefaces. However, Severin Corsten has shown that at least the Lombardic capitals for the initials were not sufficient for the large-scale project, so that new ones seem to have been cast in the course of the production process. For the other typefaces, it would still have to be verified whether they were available in sufficiently large quantities.⁶²

In any case, the illustration scheme of the chronicle could not be achieved with available wood cuts. The majority of the 108 woodcuts (this number is provided by Christoph Reske) had to be produced either in the print shop itself or commissioned from woodcutters. Certainly, also to save costs, in most cases they were reused several times, so that of the 108 woodcuts mentioned, there are a total of 368 illustrations per copy.⁶³ In addition, the largest single expense was undoubtedly the amount of paper that the chronicle project devoured. How many leaves had to be bought largely depended on the print run. Unfortunately, we do not have any contemporary information regarding the number of copies produced.

58 Cf. Finger 2001, 115–117. In the same edited volume Uwe Neddermeyer's assessment is much more cautious: Even an unskilled printer, he argues, would have been able to estimate expenses for labor and material as well as the sales of his works. He therefore suggests that the events of March 1499 should not be interpreted solely in terms of the chronicle project, but in terms of the overall slow decline of the printing business at the workshop. Cf. Neddermeyer 2001, 131–132.

59 Cf. Corsten 1982, 27–28, 38.

60 For more details cf. Corsten 1982, 36–38; Schmitz 1990, 326–327.

61 Cf. Finger 2001, 116–117 who drew this conclusion from Corsten 1982, 44–45 where Corsten writes that the chronicle had ruined the printer financially. However, this judgment does not coincide with the analysis of the previous pages.

62 Cf. Corsten 1982, 13–15, 25; Reske 2001, 98–99.

63 Cf. Reske 2001, 105–106.

Modern estimates of how many copies of the chronicle had been produced in the spring and summer of 1499 vary considerably. Based on the determined production period of only eight months and estimates of the workshop's printing output, Severin Corsten in 1982 assumed a print run of about 250 copies.⁶⁴ Since then, however, our knowledge of extant copies has increased considerably. In view of the at least 240 copies or fragments currently known in public institutions, this assumption must therefore appear too low from today's perspective. In 2001, Uwe Neddermeyer, bearing in mind other comparable printing projects of the period, documented by contracts or other written sources, assumed a much higher print run of 600 to 800 copies.⁶⁵ At the same time, his considerations are based on a different calculation of the possible maximum daily output of the workshop. Moreover, unlike Corsten in 1982, Neddermeyer assumes that Koelhoff could have worked not with only one but rather two presses simultaneously, an assumption that is confirmed to a certain degree by Corsten's later observations on the typesetting process of the chronicle in an article from 2009.⁶⁶

This range within the print run has a considerable impact on the quantities of paper Koelhoff the Younger had to procure during the first eight months of 1499: While he would have had to buy 92 000 sheets of paper for 250 copies containing 368 leaves each, this number increases to the impressive figure of 220 000 to 294 400 required sheets for 600 to 800 copies.⁶⁷ Unlike today's projects, the entrepreneur could not readjust during the printing process. Since the chronicle was produced quire by quire, he had to commit himself to the number of copies at the beginning of the enterprise. If he had reduced the number of copies at a later point in production, he would have had to throw away the pages that were initially printed in excess.

On the other hand, Koelhoff the Younger had more leeway in the decoration of the chronicle with illustrations. Noticeably, in the first part of the chronicle, the number and density of illustrations is significantly higher than in the following part.⁶⁸ This has been explained by the fact that some of the illustrations were so badly worn down that they could no longer be used, but above all, the printer had supposedly run out of capital for new woodcuts. Certainly, illustrating was a time-consuming and costly undertaking that also affected the production process in terms of time. This is indicated by the quire 'K', which, with a total of five sheets, is more extensive than the usual ternion. Severin Corsten explains this by the fact that the inner sheets of the gathering were printed later, perhaps because the production of the woodcuts had been

⁶⁴ Cf. Corsten 1982, 27–28.

⁶⁵ Cf. Neddermeyer 2001, 130.

⁶⁶ In a later publication Severin Corsten revised his findings and supposed that two typesetters worked simultaneously. However, he did not state how many printing presses were active in the workshop. Cf. Corsten 2009.

⁶⁷ Cf. Finger 2001, 116. Even the 250 copies originally estimated by Corsten would—according to Heinz Finger's calculations—have consumed 9 000 sheets of paper in the first six weeks alone, assuming an average typesetting and printing output of two sheets per day.

⁶⁸ Cf. Corsten 1982, 19; Reske 2001, 108 calculated that 64 % of the pages are not illustrated.

delayed.⁶⁹ Compared to the others, these illustrations contain strikingly detailed and small-scale representations of the coats of arms of the patrician families of Cologne.

Overall, it is apparent that the chronicle project was a financial risk for Koelhoff the Younger.⁷⁰ Nevertheless, this observation does not yet answer the question of whether his willingness to take a risk was ultimately rewarded or disappointed and how well and quickly we must imagine the sales of the work after its completion. Both Heinz Finger and Uwe Neddermeyer are doubtful, but their assessment is based on sparse evidence.⁷¹ Only the examination of a substantial number of copies can determine the contemporary dissemination and sales. Here, however, it should at least be briefly pointed out that in view of the numerous copies known today, with an estimated print run of 600 up to 800, between about 30 and 40 % were successfully sold. Furthermore, this figure must be higher, since hardly all of the copies sold would have survived to this day.

This leads us back to Heinz Finger's hypothesis that the printer-publisher Johann Koelhoff the Younger fundamentally miscalculated the enterprise by misjudging the sales prospects for such a work. Finger assesses that the work would have been too narrowly related to the history of Cologne, too critical regarding the church, and above all it would have been written in vernacular despite its lack of attractive entertaining stories and miracles for the laity without knowledge of Latin.⁷² At a first glance, these assessments coincide with the figures for Cologne's incunable production as a whole. According to Ursula Rautenberg, 96 % of Cologne's print production before 1500 was in Latin. With just 4 % vernacular publications, the diocese and university city of Cologne even fell short of the corresponding quotas elsewhere.⁷³

However, a closer look at Ursula Rautenberg's and Wolfgang Schmitz's studies on vernacular print production in Cologne in the 15th and early 16th centuries as well as already Ernst Voulliéme's pioneering work from 1903 provide a different, clearly more positive picture for Koelhoff the Younger.⁷⁴ According to them, both father's and son's workshops in particular were known for books in the Ripuarian language, i. e., in the written dialect used in Cologne and the Rhineland at the time. Especially since the late 1480s, and possibly increasingly after the younger Koelhoff joined his father's workshop, this field seems to have developed into a core business, which, according to Rautenberg, accounted for about 30 percent of the production.⁷⁵ In terms of content, the titles are very diverse. They range from the indulgence list for churches in

⁶⁹ Cf. Corsten 1982, 12.

⁷⁰ Cf. Corsten 1982, 13.

⁷¹ Cf. Finger 2001, 117; Neddermeyer 2001, 132.

⁷² Cf. Finger 2001, 117–118 estimates that Koelhoff would have been able to find at most 100 potential customers living in the Ripuarian speaking area between Andernach und Nijmwegen.

⁷³ Cf. Rautenberg 1996, 13; Mertens 1983, 105 emphasizes that Latin books were easier to sell and only few historiographical works were produced.

⁷⁴ Cf. Voulliéme 1903/1978, LXVIII. He rates Koelhoff's vernacular books as very valuable.

⁷⁵ Cf. Rautenberg 1996, 15–16.

Cologne⁷⁶ to religious educational texts such as a Ripuarian adaptation of *Die vierundzwanzig Alten* by Otto von Passau⁷⁷ or the *Christenspiegel* written by Dietrich Coelde,⁷⁸ which was even published three times, to secular entertainment literature, such as the tale *Stinchen von der Krone*,⁷⁹ which originated in Cologne, as well as Ripuarian translations of the widespread *Haimonskinder*⁸⁰ and the collection of fables by Aesop.⁸¹

Koelhoff's publishing program also included a work of contemporary history, the chronicle of Christian Wierstraat, composed in verses, reporting the events of the Neuss War in the 1470s, which were observed throughout Europe. First published in the workshop of Arnold ter Hoernen in 1476,⁸² Johann Koelhoff the Younger decided to print a second edition of the book in 1497, two years prior to the chronicle project.⁸³ Obviously, therefore, the text must have been a popular success, although only very few copies are known to us today.⁸⁴ The author of Koelhoff's Chronicle used it extensively as a model for his detailed passages on the siege of Neuss.⁸⁵ And even beyond this specific title there are indications that the author of the chronicle knew and used the vernacular literature from Koelhoff's workshop. An example is the list of churches and monasteries he took from the above-mentioned indulgence directory printed in 1492. At the same time, a woodcut recurs that can also be found in the printed edition of *Dornenkrantz von Köln*, a moral-educational pamphlet by an Augustinian monk of Cologne, produced around 1490 by Koelhoff the Elder.⁸⁶

Thus, Johann Koelhoff the Younger was obviously a specialist for printed books in the Ripuarian language, and the production of the extensive chronicle named after him today in the writing dialect of Cologne as well as the wider region must not appear naive. Rather, he must have anticipated a local and regional audience that wanted the material of the chronicle in *slechter duytscher spraeche* ('in straightforward German language'), as the prologue of the work explicitly explains. For, it states, there are many Latin history books, but their knowledge would remain inaccessible to laymen

76 *Ablässe und Heiltümer der Stadt Köln* 1492 (GW 8). Cf. Rautenberg 1996, 150–152.

77 Otto von Passau, *Die vierundzwanzig Alten* 1492 (GW M28507).

78 Dietrich Coelde, *Christenspiegel* 1489 (GW 7145), reprinted Cologne 1493 (GW 0714520N) and 1498 (GW 7146).

79 *Stynchyn van der Krone* [1489/90] (GW 12808). Cf. Rautenberg 1996, 15–16; Schmitz 1990, 217–219.

80 *Les quatre fils Aymon* [1493] (GW 3140). Cf. Schmitz 1990, 212; Rautenberg 1996, 15–16. The translation is based on a literal transcription of a Dutch print from 1490.

81 Aesopus, *Vita et Fabulae* 1489 (GW 364). Cf. Schmitz 1990, 208–209; Rautenberg 1996, 15–16.

82 Wierstraat, *Histori* [around 1476] (GW M51549). Cf. Bauschke-Hartung 2017.

83 Wierstraat, *Histori* 1497 (GW M51550).

84 Of Wierstraat's *Histori*, only two copies of the first edition and five copies of the second edition are known to have survived. Cf. Bauschke-Hartung 2017, 243–245. Despite these small numbers, the chronicle must have been a success, so that in 1564 even a prose edition of the text in 16th century standard German was published. This dialect replaced Ripuarian as the written dialect in this period. Cf. Bauschke-Hartung 2017, 246.

85 Cf. Cardauns 1876, 233.

86 *Doernenkrantz van Collen* 1490 (GW M16401). Cf. Rautenberg 1996, 165–166.

unfamiliar with Latin, although they would also like to read ‘of such things and stories’ (*va[n] sulchen dyngen ind geschichten*).⁸⁷ That Koelhoff continued to target this audience even after the assumed ‘failure’ of the chronicle in 1499 is confirmed by the publication of the vernacular legends of St. Barbara, Dorothea, Margaret, and Catherine, which began in 1498 and continued in the 16th century. Dominated by a total of three workshops in Cologne, including the workshops of Koelhoff the Younger and, after his death, his successor Heinrich von Neuss, these legends must have been a great success according to Ursula Rautenberg, as they account for a third of the early vernacular print production in Cologne. Unlike Koelhoff’s Chronicle, however, these were—again according to Rautenberg—small booklets decorated only with a woodcut title.⁸⁸ Thus, it remains to be debated whether the dimensions of the chronicle printing in 1499 overstrained Koelhoff’s capacities. In order to pursue this question, the tangible circumstances of the production will be scrutinized in the following paragraphs.

4 The Typesetters, Printers, and Woodblock cutters of the Chronicle

Today, in most cases, only the names of the owners of late medieval printing workshops are known, since they, like Koelhoff, inscribed themselves in the colophons of their incunables. However, unlike manuscripts, where scribes could easily execute different steps of the production process, it can be assumed that several people must have been involved in the production of a printed book. In addition to the owner, typesetters, proofreaders, and hands at the printing press were needed, as well as type founders and woodcutters for specialized tasks. On the whole, we rarely learn anything about them from the written sources. In the case of Koelhoff’s Chronicle, they are completely invisible. Therefore, the only possibility is to deduce their existence and their activities from the materiality or the layout of the printed book.

In the case of Koelhoff’s Chronicle the typesetting staff had to perform an immense amount of work during the probable eight months of printing from the beginning of 1499 until the completion on August 23rd mentioned in the colophon. Severin Corsten estimated that for the typesetting of each page of the chronicle about 3 000 pieces of type were needed without counting the blank characters.⁸⁹ If one extrapolates these figures to the 712 pages of text in the book, this means that the typesetting staff had to pick lead letters out of the typesetting box more than two million times and place them in the correct order on the composing stick. Given these numbers of required materials, it becomes clear why, unlike today, in the early workshops of the incunable and early printing era, a book could not be completely typeset before it was printed.

⁸⁷ *Kölnische Chronik* 1499 (GW 6688), fol. 4r.

⁸⁸ Cf. Rautenberg 1996, 20–21, 60–67; Schmitz 1990, 54–68.

⁸⁹ Cf. Corsten 1982, 26.

Instead, printed books were usually produced in quires. As soon as a gathering was printed, the typesetter or his assistant had to remove the letters from the so-called galley and sort them back into the letter case.

According to modern estimates, a typesetter could set about four folio pages a day.⁹⁰ Corsten considered this to be possible for Koelhoff's Chronicle. If one assumes around 200 working days in the eight months of the presumed production period, then with 712 pages in length, this results in a daily productivity of three and a half pages.⁹¹ If these assumptions are correct, Koelhoff the Younger would have had to employ only one typesetter in 1499. However, Corsten assumes that he was at least supported by an assistant, who simultaneously cleaned the typeset pages that had already been printed and took them apart again in order to arrange them back in the typesetting box. For this division of labor to function, Corsten assumes the existence of two separate letter cases.⁹²

However, it is also conceivable that Koelhoff the Younger employed more than one typesetter for his chronicle. If the text had been divided among several workers, special care had to be taken to ensure that the last section of one typesetter merged as seamlessly as possible with the first section of another typesetter. Today, it can only be determined when this failed, either because the layout appears compressed or stretched or because (for example, in comparison with parallel traditions) parts of the text were shortened or extended by insertions. Such observations have also been discussed by Uwe Neddermeyer and Christoph Reske for Koelhoff's Chronicle.⁹³ In a journal article from 2009, Corsten expressed a similar opinion, too: In parts of the chronicle, he considers it likely that the typesetters had overestimated the size of the text and therefore the author still had to insert pieces of text of a more general nature to avoid a blank space on this page.⁹⁴

As known from other contexts, the typesetters were not the only ones responsible for the text. Unfortunately, it is not known whether Koelhoff the Younger additionally employed a proofreader for the project or if possibly the author of the chronicle conducted this task. In any case, Corsten was able to prove that in some passages errors must have already been identified during the printing process. As we can see from the differences comparing single copies of the print, they must have been improved on the fly.⁹⁵

This brings us to the printing itself. For each printed sheet or page, the set printing plate had to be inked, a moistened sheet of paper had to be inserted into the press, and finally the press had to be set into motion. In order to conserve labor during the

⁹⁰ Cf. Corsten 1982, 21. This estimate is based on contracts with typesetters from Italy and France in the 15th century. Additionally, cf. Schmitz 2018, 119.

⁹¹ Cf. Corsten 1982, 27, which counts the days without Sundays and holidays.

⁹² Cf. Corsten 1982, 26.

⁹³ Reske 2001, 94–95 found one page that indicates that the handwritten draft was not set into type in the order of the text. See also Neddermeyer 2001, 124.

⁹⁴ Cf. Corsten 2009, 95–101 opposed to Corsten 1982, 22.

⁹⁵ Cf. Corsten 1982, 12.

printing process, Koelhoff's Chronicle was printed sheet by sheet rather than page by page, according to Corsten's reconstruction.⁹⁶ This had the advantage of halving the number of printing operations: With an estimated print run of 600 to 800 copies, this meant an average of only 250 000 repetitions of the process described above, rather than around 500 000.

For the daily production rate of the workers at the press, Corsten cited the expertise of a practitioner in 1982 who did not consider more than 500 printing operations per day possible for a hand press.⁹⁷ If this assumption is true and Neddermeyer's estimates of the print run are also plausible, then Koelhoff the Younger would have had to work with three presses for his chronicle project.

In a final step, let us take a look at the cooperation between typesetters and workers on the press, which could only become more complicated as the number of employees increased. Ideally, it can be assumed that the typesetting staff set as much on one day as could be printed on the following. Even if one assumes only *one* typesetter and *one* team at the press, however, the decision to print by the sheet and not by the page quickly reveals a considerably greater demand for planning the work process:

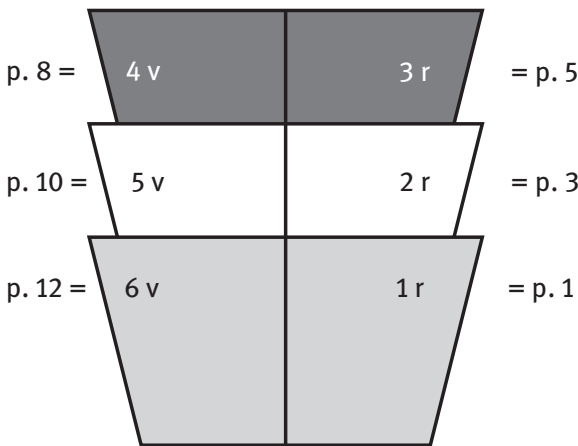


Fig. 1: Schematic representation of a ternion quire of Koelhoff's Chronicle (*Kölnische Chronik*).

The figure (Fig. 1) schematically shows an unfolded quire of Koelhoff's Chronicle, which consists of ternions, i. e., three sheets with four pages each. In total, each quire comprises six sheets or twelve pages.⁹⁸ The figure shows which pages were next to each other on one sheet and therefore had to be printed together. Thus, the first page was printed with the last page of the quire, the second with the eleventh, the third with the tenth, and so on. Only on the inside of the middle sheet (marked in dark grey),

⁹⁶ Cf. Corsten 1982, 23–26.

⁹⁷ Cf. Corsten 1982, 28.

⁹⁸ Cf. Corsten 1982, 23–26.

the pages which also belonged together were opposite each other during the printing process.⁹⁹ In order to ensure clean transitions in the text flow and to avoid the blank spaces described above, hypothetically a complete quire had to be set before printing could begin. However, Severin Corsten was able to show that the typesetters found a way of not having to set the entire quire. In all likelihood, they printed the center of the gathering first and worked their way outwards from there.¹⁰⁰ Still, about 21 000 letters had to be set without blank characters before a quire could go into production.

Let us now take a closer look at the procedure. First, the third sheet (dark grey) was printed. Therefore, the first to third leaves as well as leaf 4r had to be set. The two black arrows in the following figure (Fig. 2) show the order of the typesetting process. The white arrow demonstrates the order of printing. After the third sheet (dark grey), the second sheet (white) was printed and finally the first sheet (light gray). The quire was not printed in the reading direction, but first the inner pages and then the outer pages of each gathering were produced. Another indicator for this procedure could be the quire marks. Unlike in most printed books of the period, they were not only placed on the first three leaves of the quire but also on leaf 4r, which was not necessary, as it had the mark of the third leaf on the back. Possibly, this marked the point at which printing could begin.

Sheet 1	leaf 1r (page 1) QM	leaf 6v (page 12)
	leaf 1v (page 2)	leaf 6r (page 11)
Sheet 2	leaf 2r (page 3) QM	leaf 5v (page 10)
	leaf 2v (page 4)	leaf 5r (page 9)
Sheet 3	leaf 3r (page 5) QM	leaf 4v (page 8)
	leaf 3v (page 6)	leaf 4r (page 7) QM

Fig. 2: Order of setting (black arrows) and printing (white arrow) the leaves of each quire. QM = quire marks. (This figure originates from Corsten 1982, 23 and was slightly modified).

Why was such a complex approach chosen? While the procedure required considerable planning, it saved half the work as well as time compared to printing individual pages, since each sheet only had to be loaded into the press and then dried twice rather than four times. Overall, this scheme seems to have worked well for the producers of Koelhoff's *Chronicle*. Only two quires deviate from the general pattern.¹⁰¹

⁹⁹ This becomes especially apparent through the *Quaternionenadler* in *Kölnische Chronik* 1499 (GW 6688), fol. CXXXVIv/CXXXVIIr, which extends over a double page in the middle of a quire and was printed with a woodcut consisting of one piece. This observation is further supported by the fact that on each side of one sheet the smaller woodcuts are found only once, cf. Corsten 1982, 24–25.

¹⁰⁰ Cf. Corsten 1982, 23.

¹⁰¹ See GW 6688 for the collation formula. One quire, marked with the minuscule 'e', consists of only two sheets, i. e., four folios, without any apparent reason. Severin Corsten 1982, 12, 22 suspects that a rare moment of carelessness led to this mistake.

One of these is marked with the majuscule 'K' and consists of five folios (20 pages) instead of three (12 pages). The reason for this deviation is most likely to be found in the illustrations, as briefly mentioned above. In addition to previously used woodcuts such as vignettes of a bishop or an emperor, it also contains 48 coats of arms of the patricians in Cologne.¹⁰²

The previous deliberations showed that Koelhoff reused some woodcuts from earlier productions. However, most of them cannot be found in other printed books and were probably made especially for the chronicle by an unknown woodcutter.¹⁰³ However, a small part of these motifs is repeated numerous times, so that only 108 different woodcuts were used in total.¹⁰⁴ The repeats are mainly portraits or vignettes of officials, namely the emperor (85 times), pope (74 times), bishop (52 times), king (45 times), or a youthful hero (18 times). These portraits are sometimes shown several times on one page.¹⁰⁵ To allow for this, the emperor, for example, was depicted in six slightly different versions.¹⁰⁶ The other illustrations, however, are used only once or a few times, as in the case of the woodcut depicting a city under siege.¹⁰⁷

It remains to be discussed whether the repetitions of the woodcuts were really intended primarily to reduce costs or whether they are not better interpreted as a deliberately used visual structuring device. By repeating emperors, kings, or bishops as stereotypical functionaries in the left margin, readers are able to quickly classify the contents when turning the pages of the chronicle.¹⁰⁸

These considerations may already be a first answer to the question regarding what added value was created by printing Koelhoff's Chronicle instead of copying it by hand. On the one hand, the use of different typefaces is still comparable to the traditions of manuscript culture, so that the continuous text could be divided by headings with initials offset in size, pilcrows, and highlighted dates. On the other hand, there are for example visual orientation aids implemented in the layout, which stand out from the standards in manuscripts. To be mentioned here above all is a 24-page,

102 Cf. Corsten 1982, 12. These were probably added after the initial production of this quire because, as the foliation shows, quire 'K' was originally planned as a ternion, too. It was to consist of the six leaves LV to LX. At the time of its production, however, the corresponding woodcuts were most likely not yet finished, and their extent seems to have been unclear. The fact that these sheets are not foliated and the counting is not correct suggests that they were inserted into the quire at a later time. Due to the fact that there were only 15 coats of arms in the *Agrippina*, Severin Corsten 1982, 22 suspects that originally Koelhoff's Chronicle was to contain fewer coats of arms.

103 See footnote 48 for information on the illustrations which were reused from other incunables.

104 Cf. Reske 2001, 105.

105 Cf. as an arbitrarily chosen example, a portrait of the emperor can be found three times on one page in *Kölnische Chronik* 1499 (GW 6688), fol. XLVIIIv.

106 Cf. Schramm 1924, plate 179, Nr. 808–810, 813–815.

107 *Kölnische Chronik* 1499 (GW 6688), fol. LIIIr and CCCXXIIv.

108 Cf. Reske 2001, 108–110: The typesetters used fixed layout structures for the recurring motifs. Larger illustrations were placed in varying positions and in some cases filled the entire page.

double-column index, which was prefixed to most copies,¹⁰⁹ but could certainly only have been created after the main text of the chronicle had been completed.¹¹⁰ The index is arranged alphabetically and refers to the printed foliations.¹¹¹ It can be used in conjunction with the column titles at the top of each page, which greatly facilitated the readers' selective use of the work.¹¹²

Even though indexes and foliations were also used in manuscripts, the effort involved in creating them was more worthwhile for printed works. Here the production team of Koelhoff's Chronicle made use of the advantages of printing. At the same time, however, it is again apparent that the printing process in the early period cannot yet be distinguished categorically from the production process of manuscripts and the 'variation' from copy to copy that is typical for handwriting. Both the foliations at the head of the leaves and the quire marks at their foot, intended for the production process or the bookbinder, repeatedly show minor errors. In addition, the comparison of different copies shows that these were partially corrected in the ongoing production process.¹¹³ This too was typical for handwriting.

5 Authorities and Censorship in Cologne

To this day, there is an ongoing debate, initiated by scholars like Konstantin Höhlbaum during the 19th century, whether Koelhoff's Chronicle was 'not protected from the hatred of the higher powers' by its 'warm love for the metropolis on the Rhine'.¹¹⁴ Behind this is the assumption that the city's authorities, both the archbishop as well as the city council, would have vigorously opposed the dissemination of the work.

A key source for this presumption is a note from the early 17th century supposedly found in a church archive but lost today. However, in the 19th century it was said to have contained information about the chronicle's author fleeing to France for fear of persecution, while the printer should have been imprisoned and several hundred

109 In some copies the index is missing (e. g., Munich, BSB, 2 Inc.s.a. 303; Cologne, USB, RHFOL332#a; Cologne, USB, RHFOL332#b), while in others the index can be found at the end instead of prefixed (e. g., Weimar, HAAB, B1).

110 The title woodcut appears in *Kölnische Chronik* 1499 (GW 6688) on the first page of quire 'A' and also can be found on the first page of the main text, marked as quire 'A', likewise. The woodcut is used a third time on fol. CXLVIII.

111 The front and back side of each folio are explicated in the index with 'a' and 'b'. Alphabetical numbered quire marks were placed on the first four folios of each quire with few exceptions. These were important for the bookbinder and an aid when folding the sheets of each layer. Exceptions mainly occur when full-page illustrations did not allow free space for quire marks or foliation.

112 Cf. Meier 2001, 76.

113 Further smaller corrections and variations can be found in Cardauns 1876, 215–216.

114 Cf. Höhlbaum 1890, 103; Buschinger 2007, 479; Beckers ²1985, 7–10; Finger 2001, 119–120.

copies would have been publicly burned on the main marketplace in Cologne.¹¹⁵ Less drastic but similar information is provided by records preserved to this day and dating back to 1574. These records document a hearing of various citizens concerning the chronicle and its author.¹¹⁶ Among them was Dr. Hermann von Neuss (latinized Nove-sianus), 52 years old at that time, who testified that he had played with wood cuts used to print the illustrations of the chronicle as a child. He claims to have heard from his parents that unlike in the note from 1620, not the author, but the printer would have fled the city after the production.¹¹⁷

It is striking that explicit reports of a ban of the chronicle only date from the second half of the 16th and the first half of the 17th century, whereas their statements are not supported by contemporary testimonies.¹¹⁸ Furthermore, the hypothesis of a capture or flight of the printer is contradicted by the fact that Koelhoff the Younger continued to produce in his print shop after 1499 and even printed on behalf of the city. According to Severin Corsten, this hardly seems conceivable if he had fallen from favor.¹¹⁹

Instead, the idea of a crisis-ridden genesis of Koelhoff's Chronicle seems to have been shaped by the conflicts of the 1570s. The above-mentioned records of the hearings had been created on the occasion of disputes between the cities of Aachen and Cologne about primacy in the Empire.¹²⁰ In this dispute, Koelhoff's Chronicle had become an annoyance for the inhabitants of Cologne, since it did not honor their metropolis as the older of the two competitors.¹²¹ Accordingly, the city sought ways to discredit the chronicle and its content. In addition, one wanted to make it clear that it was in no way official written material of the city of Cologne.¹²² At that time, however, the printer and the anonymous author had certainly already deceased. It should therefore be emphasized not so much that the work might have been banned by municipal censorship efforts, but rather that in the decades following its production it actually experienced an audience and lively reception both within and outside the city of Cologne.

Let us now take a closer look at what contemporary indications of persecution or even censorship of Koelhoff's Chronicle we can still grasp. If at all, there is evidence of minor interventions: Severin Corsten has shown, for example, that immediately after or during the production, leaf 349 with the foliation CCCXXXIII was exchanged

115 Cf. Corsten 1982, 30–32; Finger 2001, 119; Cardauns 1876, 247–248.

116 Cf. Höhlbaum 1890, 105–107, 109. According to Höhlbaum, there was a confusion regarding Koelhoff's descendants. By mistake, not these were questioned, but those of Heinrich von Neuss, who had taken over the workshop and also part of the printing materials, which probably included the wood cuts.

117 Cf. Höhlbaum 1890, 107–108.

118 Cf. Corsten 1982, 33; Finger 2001, 119.

119 Cf. Corsten 1982, 33–36.

120 Cf. Höhlbaum 1890, 104.

121 Cf. Höhlbaum 1890, 105.

122 Cf. Corsten 1982, 33.

by the printer in some of the copies.¹²³ This leaf describes a tournament defeat of King Maximilian and contains a derogatory remark about the royal treasurer Peter Langhals. In some copies, however, it has been replaced by more innocuous wording. In these copies, the corresponding leaf was cut out and the new text carefully pasted in. Apparently, one did not want to or could not replace the entire bifolio, which could indicate that the replacement was done after the entire book was already bound. It remains speculation on whose initiative this procedure was ordered. Corsten suspects the council of the city of Cologne since it was dependent on good relations with the House of Habsburg.¹²⁴

More plausible than repressions from the municipality are assumptions of censorship from ecclesiastical institutions, e. g., by the archbishopric of Cologne. The reason for this is a censorship decree issued by the official of the archbishop's curia on November 12, 1499, a few weeks after the completion of Koelhoff's Chronicle. It prohibited the production and distribution of printed texts without a license and at the same time threatened printers who violated these requirements with excommunication.¹²⁵ This kind of ecclesiastical censorship decrees were not uncommon in the second half of the 15th century; similar measures had already been established a few years earlier in Mainz and elsewhere.¹²⁶ The center of these efforts was the concern of the ecclesiastical authorities to prevent the dissemination of non-approved texts and, in particular, translations of biblical texts in large quantities by means of the printing press. It is questionable what success these censorship efforts actually had on a broad scale.

In Cologne, however, the edict aroused resistance in favor of the incriminated printers.¹²⁷ As a result, both the city and a group of those affected tried to obtain a counter-edict in Rome.¹²⁸ At the same time, the printers continued producing in Cologne.¹²⁹ However, since Johann Koelhoff is not listed among the group of petitioners, Severin Corsten and others argue that the chronicle could hardly have been the cause of contemporary censorship efforts and, if at all, was effected as one out of many.¹³⁰

123 Cf. Corsten 1982, 32, GW 6688, annotation 3. The following copies show the modified version: Munich, BSB, 2 Inc.s.a. 302; Munich, BSB, 2 Inc.s.a. 305; Jena, ULB, 2 Germ.V,7; Cologne, USB, Enne,134; Cologne, USB, RHFOL332. The following copies contain the original leaf: Boston, Public Library, Q.403.94Folio; Munich, BSB, 2 Inc.s.a. 303; Munich, BSB, 2 Inc.s.a. 306; Liège, BU, XV.B85; Deventer, StB, 33 D 12 KL; Weimar, HAAB, B1; Wolfenbüttel, HAB, A131.2 Hist 2^o(2); Providence, John Carter Brown Library, J499.C947v1; Princeton, Scheide Library, Oversize 1584.262.27.1972q; Munich, UB, 2 Inc.germ. 82; Munich, UB, 2 Inc.germ. 82a; Düsseldorf, ULB, D.Sp.G.94 (Ink.); Cologne, USB, GBXI735+B; Cologne, USB, RHFOL332#a.

124 Cf. Corsten 1982, 33.

125 Cf. Ennen 1865, XXIII–XXV.

126 Cf. Schmitz 2018, 197–201.

127 Cf. Corsten 1982, 33.

128 Cf. Corsten 1982, 33; Ennen 1865, XXV.

129 Cf. Corsten 1982, 33–34; Finger 2001, 119–120.

130 Cf. Finger 2001, 120; Corsten 1982, 34.

6 The Readers of the Chronicle

In a final step, let us take a closer look at what information we can grasp regarding the dissemination and impact of Koelhoff's Chronicle beyond the censorship debate. In an article on printed historiography in the Middle Ages, Anna Dorothee von den Brincken points out that the early printed books reached 'a hundredfold number of readers' compared to manuscripts.¹³¹ In view of the high number of surviving copies, this judgment must undoubtedly also apply to Koelhoff's Chronicle. Nevertheless, scholarship has so far judged its impact as rather slim. Danielle Buschinger, for example, concluded that Koelhoff's Chronicle 'only had a minor influence on the historiography of the following period'.¹³²

In our opinion, these assessments are largely based on the fact that the traces of reception have not yet been systematically investigated. Neither the early modern manuscripts nor the printed copies themselves have been indexed to the extent that one could make comprehensive statements in this regard. This chapter cannot fill these gaps. In the following, however, the first indications are compiled that speak for the fact that the chronicle certainly met a broad and far-reaching interest.

In the 19th century, Hermann Cardauns, the first editor of the chronicle, already compiled some first evidence of the chronicle being copied, above all in the works of chroniclers of the Lower Rhine area.¹³³ Expanding his findings, Monika Hanauska was able to show that Koelhoff's Chronicle was used as a source or even adopted in passages in six historiographical works of the 16th and 17th century.¹³⁴ Their results are to be supplemented by references to reception in the digital repertory *Geschichtsquellen des deutschen Mittelalters*.¹³⁵ All in all, we know of more than 15 works in which Koelhoff's chronicle was used. The majority date from the early 16th century; however, its reception extends into the 19th century, when, among others, a partial translation in New High German was published in 1818 by the *Spitzische Buchhandlung* in Cologne.¹³⁶ Among the contemporary recipients, there are also prominent names; one example is the Benedictine abbot and humanist Johannes Trithemius, also mentioned in the Koelhoff Chronicle, who even used them in two of his works, the Sponheim chronicle and his *Cronicon Hirsaugiensis*, which was widely read and was reprinted as late as 1690.¹³⁷

As a second approach, the study of the extant printed copies promises to shed light on the extent and nature of the reception. In our survey of about 25 physical and digitized copies, it quickly became apparent that notes documenting ownership,

¹³¹ Cf. Von den Brincken 1987, 217.

¹³² Cf. Buschinger 2007, 485, probably adopted from Beckers 1985, 9.

¹³³ Cf. Cardauns 1876, 249–251.

¹³⁴ Cf. Hanauska 2014, 355.

¹³⁵ Cf. Bayerische Akademie der Wissenschaften 2021.

¹³⁶ Cf. Cardauns 1876, S. 250–251; Spitzische Buchhandlung 1818.

¹³⁷ Cf. Cardauns 1876, 249–250; Schreiner 1966/67, 72–138; Hanauska 2014, 355.

purchases, or donations can be found. A copy now in Heidelberg, for example, names Theodericus Nederman, a clergyman from Essen, as the previous owner.¹³⁸ A copy held in Bad Münstereifel was owned by Laurentius van den Hasselt, a *Pharmacopola* (manufacturer of medicines), which can be traced in Ghent, at the university of Leuven, and presumably also in Cologne in the first half of the 16th century.¹³⁹ A copy now in Cambridge (UK) was bought by a citizen of Speyer in 1521.¹⁴⁰ A copy held in Deventer belonged to Petrus Medmannus Coloniensis (1507–1584), a theologian from Cologne and later mayor of Emden.¹⁴¹ A copy now kept in Düsseldorf can be located in the noble possession of the *Quad von Landskron and Miel* in 1569.¹⁴² Of a copy today in Munich, we learn that it was bound in France in the 16th century.¹⁴³ In the 17th and 18th centuries, further copies were owned by church libraries, e. g., in the Bavarian monastery of Waldsassen and the Cathedral Chapter of Münster.¹⁴⁴

For the debates between Cologne and Aachen discussed above, a copy kept in the USB Cologne today is of special interest because it was donated to the Marienstift in Aachen by its dean Robert von Wachtendonk in 1577.¹⁴⁵ Thus, at the time when the two cities were arguing over their age, a copy of the chronicle was actually available in Aachen. In the same years, of course, the chronicle was also still known in Cologne. One example is again the aforementioned copy today held in Bad Münstereifel, first used by Laurentius van den Hasselt. On the last four blank pages, a later owner added chronological entries by hand starting in 1615 and ending in 1627. Based on their contents, the copy must at this time still have been in Cologne. Another example is given by the witness Hermann von Neuss, already quoted above, who was questioned in the council's hearings regarding Koelhoff's Chronicle. Even though he stated that there

138 Heidelberg, UB, B 6060 qt. INC: *Ad manus domini Theodrici Nederman canonici Ass. devenit per sortem Colonie Anno 1499* (handwritten entry beneath the colophon).

139 Bad Münstereifel, Gymnasium Library, SJ 1499, quoted here after Bongart 2016, see in particular 130.

140 Cambridge (UK), University Library: Inc.3.A.4.28[3722]. “‘Heinrich Nabell / Burg[er] zu Spyr:’ on leaf ²A1 recto, late 15th or early 16th century” quoted from MEI (<https://data.cerl.org/mei/00559630>, accessed 16/05/2022).

141 Deventer, StB, 33 D 12 KL (cf. title page). Regarding Medmann: Hesse 1932, 321–341.

142 Düsseldorf, ULB, D.Sp.G.94 (Ink.) (cf. fly leaf of the copy for ownership note).

143 Munich, BSB, 2 Inc.s.a. 302 (cf. BSB-ink C-284).

144 Princeton, Scheide Library, Oversize 1584.262.27.1972q in 1740 was in possession of the monastery Waldsassen near the Bavarian-Czech border. In Münster, ULB, Inc 173 an old library stamp proves the ownership of the Cathedral Chapter of Münster. One copy, which is now in Munich and shows almost no traces of use was probably bound together into one volume with the historical work *Scriptorum historiae Moguntinensi cum maxime inservientium* printed in 1727. The finding was probably affixed in Landshut between 1800 and 1826, where the university and thus its library resided at the time (Munich, UB, Inc.germ.82a). These examples suggest that the chronicle was still of interest in scholarly circles outside of Cologne even long after it was published.

145 Cologne, USB, GBXI735+B (cf. fly leaf of the copy for ownership note). See Offergeld 2009, 138 for the Marienstift and Robert von Wachtendonk.

were only a few copies left in Cologne, however, he himself owned a copy and claimed to read it for his recreation.¹⁴⁶

A third way to learn more about the history of Koelhoff's Chronicle is to analyze the (mostly handwritten) traces of use in the extant copies. In many of the specimens we reviewed, at least minor underlining, annotations, or corrections can be found. In addition, in some copies, missing or damaged pages or page clippings have been reconstructed in handwriting.¹⁴⁷ Since in these cases the wording corresponds to that of the undamaged printed editions and the layout of the corresponding passages was imitated, the transcription was presumably made on the basis of complete copies. In the Weimar copy, for example, almost the entire index was copied by hand from another copy.¹⁴⁸ These repairs indicate that the text was of interest and valued. It is also noteworthy that some copies were augmented by handwritten passages on pages following the printed text; these mostly list historical events of the 16th century.¹⁴⁹ The partial or complete coloring of the woodcuts, which we found in ten copies so far, also suggests a special appreciation of the owners for this work.¹⁵⁰

In the prologue of Koelhoff's Chronicle, the unknown author seems to mainly address a Cologne related audience for whom knowledge of the history of its own city was important, as it was intended to have an identity-forming effect and keep one's duties to the community present.¹⁵¹ However, the owner's notes identified so far suggest that the chronicle also found an attentive readership far beyond the region.

7 Conclusion

This article examined Koelhoff's Chronicle from a praxeological perspective. The focus on the actors shed light on the fact that numerous people were involved in the production process. Although we only know the name of the workshop's owner, Koelhoff the Younger, who seems to have been the spiritus rector of this printed chronicle, the influence of others cannot be denied. We especially want to highlight the unknown author of the text, but also the anonymous producers of the printed edition. The typesetters, woodcutters, and workers at the press all influenced the work, its contents, and its design.

146 Cf. Corsten 1982, 32.

147 Munich, UB, 2 Inc.germ. 82; Cologne, USB, RHFOL332#b.

148 Weimar, HAAB, B1.

149 Munich, BSB, 2.Inc.s.a.306; Cologne, USB, RHFOL332; Wolfenbüttel, HAB, A 131.2 Hist 2^o(2); Princeton, Scheide Library, Oversize 1584.262.27.1972q.

150 We could trace the following illuminated copies: Cologne, USB, Enne,134; Cologne, USB, RHFOL332#a; Cologne, USB, RHFOL332; Cologne, USB, GBXI735+B (partly illuminated); Boston, Public Library, Q.403.94 Folio; Munich, UB, 2 Inc.germ. 82 (only coat of arms colored); Munich, BSB, 2.Inc.s.a.302. Buschinger 2007, 467 lists two more illuminated copies in Paris and Berlin.

151 *Kölnische Chronik* 1499 (GW 6688), fol. IIv.

Even in recent scholarship, Koelhoff's Chronicle is often perceived as a failure, both economically and in terms of its reception history. In our opinion, there are strong indications that contradict this interpretation. Based on our observations, Heinz Finger's assumptions that Koelhoff the Younger was completely naive and steered into his financial misfortune without competent partners cannot be upheld. Instead, Koelhoff's and his father's production in the Ripuarian written dialect seem to have been quite profitable both in the decade before the chronicle project in 1499 and thereafter. Perhaps, the unknown author of the chronicle convinced Koelhoff that not just religious, educational, and literary texts could appeal to an audience in Cologne and beyond, but also the history of Cologne and its incorporation into the history of the bishopric, the empire, and universal history. The author must have gained this impression, among other things, from the incunables, which were already available to him in astonishing numbers while compiling his work. Moreover, the fact that Ripuarian was understood and read not only in Cologne is confirmed by the owner's notes found so far in the copies that have survived to the present day. Although this writing dialect was outdated by the second half of the 16th century, the chronicle's impact—as has become evident at the current, certainly insufficient level of knowledge—lasted for at least two centuries. Perhaps the printer, who died only a few years after its completion, may not have profited from this success. However, declaring the chronicle a 'failure' neither does justice to the printed edition itself nor to its reception history.

Despite these observations, the printing process that Koelhoff and his team conducted from spring to midsummer 1499 was certainly a major challenge, requiring both considerable capital and elaborate planning. The sophisticated logistics required become especially clear when one considers the differences to modern printing methods: In the case of such an extensive work, it was unthinkable at the end of the 15th century that the proofs would first be completed and corrected, as is common today, before the printing of the copies began. Instead, the typesetting was done just in time, which implies that delays in the supply chain—such as the timely production of the woodcuts for the illustration—had to be absorbed. Furthermore, in the case of miscalculations by the typesetters, even interventions, such as shortening or expanding the text, became necessary. Another consequence of this procedure is that errors identified during the printing process were continuously eliminated. This results in minor variations between individual copies of Koelhoff's Chronicle although there was only one edition. Likewise, for the illustrations it can plausibly be argued that the design of the chronicle was not fixed from the beginning, but that the plans for it apparently remained in flux during production.

Thus, these considerations suggest that the procedure of such a printing project at the end of the 15th century had at least some striking similarities with manuscript production that one would not assume at first glance from today's perspective. However, this does not diminish the innovative value of printed works such as Koelhoff's Chronicle at the turn from the Middle Ages to the early modern period. This is especially apparent in quantitative terms: Print reproduction allowed Koelhoff and his

collaborators to publish content that, in the case of earlier historiographical works such as the *Agrippina*, had only been accessible to a small circle. However, there are also qualitative indications: In comparison to the period's manuscripts, the chronicle was illustrated with relatively little effort. Regarding the design, it can also be noted that the team around Johann Koelhoff the Younger knew how to exploit the advantages of printing, for example by providing the elaborate index and corresponding page layout in order to increase the usability and accessibility of this work for its readers.

Finally, it remains ambiguous whether incunables such as Koelhoff's Chronicle owe more to the manuscript era or the dawn of printing. It is questionable, however, whether contemporaries would have found such considerations useful. If one follows the proponents of the 'black art', among whom also the author and probably the whole team of Koelhoff's Chronicle were, then letterpress printing was not yet perceived as an antithesis, but rather as a perfection of manuscript culture.

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Abbreviations

BSB	Bayerische Staatsbibliothek (Bavarian State Library)
BU	Bibliothèque de l'Université, Centre d'Information et de Conservation des Bibliothèques
GW	Gesamtkatalog der Wiegendrucke
HAAB	Herzogin Anna Amalia Bibliothek (Duchess Anna Amalia Library)
HAB	Herzog August Bibliothek (Herzog August Library)
ISTC	Incunabula Short Title Catalogue
StB	Stadsarchief en Athenaeumbibliotheek (Athenaeum Library and City Archive)
UB	Universitätsbibliothek (University Library)
ULB	Universitäts- und Landesbibliothek (University and State Library)
USB	Universitäts- und Stadtbibliothek (University and City Library)
WLB	Württembergische Landesbibliothek (State Library of Württemberg)

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Fig. 1: Schematic representation of a ternion quire of Koelhoff’s Chronicle (*Kölnische Chronik*).

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Fig. 2: Order of setting (black arrows) and printing (white arrow) the leaves of each quire. (This figure originates from Corsten 1982, 23 and was slightly modified). © Carla Meyer-Schlenkrich/Paul Schweitzer-Martin.

