
Chapter 2

Layout, Design, Text-Image

Nikolaus Dietrich, Lisa Horstmann, Andrea Bernini, Susanne Börner, Sarah Braun, Johannes Fouquet, Tobias Frese, Adrian Heinrich, Rebecca Hirt, Carina Kühne-Wespi, Giuditta Mirizio, Rebecca Müller, Gustavo Fernández Riva, Anett Rózsa, Anna Sitz, Friederike Stahlke, Chun Fung Tong, Sebastian Watta

Chapter 2

Layout, Design, Text-Image

Nikolaus Dietrich, Lisa Horstmann, Andrea Bernini, Susanne Börner, Sarah Braun, Johannes Fouquet, Tobias Frese, Adrian Heinrich, Rebecca Hirt, Carina Kühne-Wespi, Giuditta Mirizio, Rebecca Müller, Gustavo Fernández Riva, Anett Rózsa, Anna Sitz, Friederike Stahlke, Chun Fung Tong, Sebastian Watta

A text can be spoken, heard, or even just thought. Its wording can be determined in detail down to the letter; or it can also be malleable. If the text is written down, its wording becomes fixed. While in our current digital age, writing down a text is no safeguard against changes being made in how such a text is represented, under the conditions of a material culture of writing, the act of writing something down inevitably entails a second ‘fixing’, as it were: the text takes on a *concrete form*. This is determined by a wide array of factors: for instance, by the writing support, the writing technique, the letters/characters used, possibly the combination of the latter with non-linguistic signs on the same writing support, and the spatial arrangement of all these elements on the writing support.¹ This last point, in which we see the various aspects mentioned here converge, is what we understand and analyse in the following as ‘layout’.²

The abovementioned aspects are interrelated in many ways and determine collectively, in a complex web of interdependency, the phenomenon of layout in a comprehensive understanding of the term. The specific stylisation of the letters of Gothic script thus not only depends on individual scribes working within the framework of the typical scribal aesthetics of their time, but is also connected to the ductus of the quill (as a writing tool) on parchment (as the writing support).³ The way in which the layout of a text comprises more than just characters depends, among other things, on the type and material of the writing support. Thus, the layout of writing in a magnificent liturgical codex may integrate pictorial elements of various kinds, while monumental stone inscriptions chiselled onto building façades may appear in combina-

1 For this definition of layout, we have taken as our basis the normal case of an inscribed support of manageable dimensions: papyrus scrolls, book pages, stone stelae, and the like. Cases in which the writing support goes far beyond such dimensions, as well as multi-part inscribed monuments (e.g., the stone surfaces of a public square with the assemblage of inscriptions there), where the question of layout would touch on that of topology, are not included in what follows.

2 On the conceptualisation of writing as an arrangement, see the foundational work by Cancik-Kirschbaum/Mahr 2005.

3 See Enderwitz/Opdenhoff/Schneider 2015, esp. 475–480 on writing with the pen in Arabic calligraphy and European book illumination; and Becker/Licht/Schneidmüller 2015, 337–348 on parchment as a writing material.

tion with similarly chiselled ornamentation. If the object described is itself already an image, as in the case of a statue covered with inscriptions, the layout arising from the combination of linguistic and non-linguistic signs is again of a different kind. By contrast, if the act of writing is performed on an arbitrary object that serves the purpose of inscription but is otherwise worthless (such as a pottery shard or ostrakon), then what is written usually ends up lacking any non-linguistic embellishments. But even in this supposedly simplest case of textuality subject to pragmatic aspects, the question arises as to how the writing is designed, and this perhaps even more intensively so in such a case, since the writer must find a way of dealing with the random specifications presented by the object used as the writing support in order to attain a desirable graphic text form. Even without the use of figurative elements, the pragmatic act of writing inevitably results in a certain appearance on the part of the writing that could always have turned out differently. The basis of the following analysis is therefore the realisation that *there is no writing without layout*.

In addition to the material factors already mentioned, it is not surprising that the content of a text also proves to be an essential factor in the layout of writing. The relevance of content for our analysis is evidenced not only by the *semantic dimension of the arrangement* of the text on its support, which can be ascertained in many cases and through which, as it were, mental arrangements become crystallised in material writing; it is also made clear by the seemingly banal correlation between *layout and text type*, which can often be observed across cultures and epochs, but is also multi-layered and sometimes deliberately undermined. In many cases, we see the emergence (for individual text types) of standardised layouts that are valid for a wide variety of cultural spheres and eras. The immediate recognisability of a text type that is thus provided can decisively influence the attribution of meaning in the subsequent reading process. Moreover, this recognition factor can define the epistemic status of the statements made in the text (as in the case of a scientific text with its footnote apparatus), or even be indispensable for the successful attribution of meaning, as in the case of a list, which as mere text results in a grammatically meaningless juxtaposition of words, but in the specific layout of a list conveys precise informative content.

The relevance of content-related points of view in the analysis of laid out text also applies to borderline cases of material writing, such as the occasionally encountered nonsense inscriptions found for instance in Greek vase painting⁴ or on Indo-Scythian coinage, whose meaningless sequences of letters only imitate 'normal' inscriptions in the layout and letter forms used. Insofar as they still hint at some inherent content, even though their wording is meaningless, these instances of writing invite their respective recipients to ascribe meaning. Another borderline case of material writing (albeit a much more common one) is when the meaning of the text is present, but the text itself is no longer legible for a variety of reasons: for example, because

⁴ See recently Chiarini 2018; some remarks in Dietrich 2018, 188–192.

the inscribed artefact has been permanently removed from its context of use through being stored or deposited elsewhere, or because the writing is still visible as such on account of its location and/or graphic design, but is no longer legible per se as text.⁵ In addition to both text content and the initially mentioned material factors that determine layout, such borderline cases of material writing bring up another factor of essential importance in the following analysis of layout as a necessary property of all writing: namely, reception. As we shall show, under the conditions of material text culture, there is less of a clear-cut distinction between the categories of reception and production. It is neither the case that layout in material text cultures is mechanistically derived from the conditions of the production of writing, nor that layout is unilaterally subservient to the reception of material writing, but rather that layout breaks through this dichotomy. The multifaceted phenomenology of the graphic design of writing in material text cultures can be explained much better *if layout is situated between production and reception* in the analysis.

The following analysis of layout (including the particularly interesting special case of when writing and images come together) is structured according to the aspects mentioned here: layout and writing support; the semantics of layout; layout between production and reception; layout and text type. As different as layout practices may be between writing cultures and epochs, these aspects nevertheless mark out fundamental problem areas, and it is the critical engagement with these problems that has given rise to the layout conventions that individual academic fields and disciplines have been able to describe and ascertain.

Thesis 7

Layout and writing supports are mutually dependent. In non-typographic writing cultures, the influence of the writing support is more diverse.

If layout is understood as a spatial arrangement on the writing support, then it is first necessary to examine how the latter co-determines the layout through its own form, material, and affordances for writers and readers. The fact that a writing support, with its specific materiality profile, can be highly prescriptive for the layout of what is written on it does not appear at all to be self-evident if we look at the main writing support in typographic societies, i. e., a sheet of paper — be that in loose leaf form, as a page in a book, a printout of a digitally created text document, etc. When it comes to the layout conventions we tend to take for granted — the fact that we usually present texts in

⁵ On the restricted presence of writing, see Frese/Keil/Krüger 2014 and some contributions in Keil et al. 2018.

parallel lines, divide them into paragraphs, leave a certain margin around the central text block, supplement these texts with headings and subheadings, etc.—are these really contingent upon the fact that the text in question is printed or written on paper, and not on other material? Are not criteria such as the clear presentation of the meaning of the text and the facilitation of fluent reading more decisive by far in this regard?

In non-typographic societies, it is not difficult to find examples of material writing in which the correspondence between layout and writing support is immediate. One such case is presented by scrolls made of narrow bamboo or wooden strips that are bound together, among the oldest known Chinese writing materials and used in early imperial administration.⁶ The vertical alignment of the ‘lines’—the characteristic ‘superposition’ rather than ‘juxtaposition’ of characters—results directly from the affordances of the writing material, where the narrow vertical strips provide just enough space for one character, almost forcing one to position the next character below it, rather than beside. This example, in which the nature of the writing support proves to be strongly prescriptive for the layout of the writing, could be cited as a paradigmatic case of a theory of the layout of writing that would emphasise material factors. However, it would be just as easy at once to proffer counter-examples in which the nature of the writing support has been adapted to existing layout conventions, albeit ones that primarily facilitate reading. Thus, the simplest explanation for the portrait format—more common diachronically and transculturally in non-typographic societies than the landscape format for written book pages—would be that the former gives rise to relatively short lines that make reading easier. This in turn could serve as the basis for a theory of the layout of writing that would prioritise the reception of the text’s meaning and subordinate the material writing support to this meaning of the text. Whether the cases of adapting the writing support to the layout should be given theoretical priority or vice versa is a bit like asking what came first, the chicken or the egg. Rather, what determines the phenomenology of material writing cultures in the most diverse ways—and what we present here via a few examples—is the *mutual conditionality* of formal layout and the material writing support. Nevertheless, in the non-typographic writing cultures studied, the writing support is generally given much greater weight in this mutual conditionality, and this material dimension of a writing culture often penetrates more deeply into the realm of formal layout than would correspond to modern intuitions.

A marble Attic inscription stele from the late sixth century BCE, on which the wording of an Athenian public decree was carved for its public installation in the sanctuary, may illustrate the latter point (Fig. 1).⁷ Although the artefact was made solely to accommodate this inscription, and the perfectly smoothed surface and

⁶ Tsien 1962, 183–184. The vertical alignment of lines is nevertheless possible even without such a material explanation. On Egyptian papyri, the oldest (and later abandoned) method was also to write in vertical columns, although papyrus certainly lends itself to a horizontal orientation of text.

⁷ Dietrich 2020, 177–179.

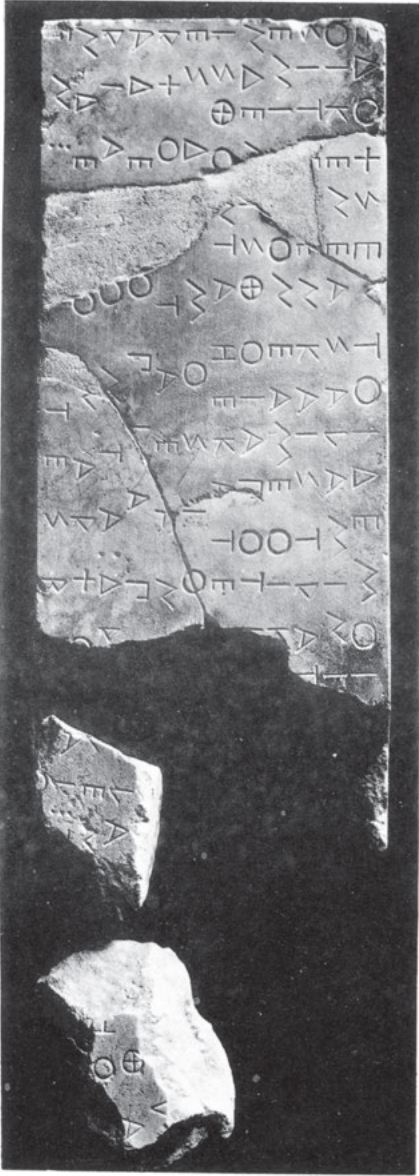


Fig. 1: Attic inscription stele with a decree concerning Salamis (IG I³, 1 1), late 6th century BCE. Athens, Epigraphic Museum 6798, 6798a, 6825, and 12 936. Reproduction from Kirchner 1935, pl. 6.13.

extremely neatly carved letters guarantee good visibility and legibility for the text, the layout—with its long, vertically running lines of script—is oriented towards the highly rectangular shape of the inscribed object rather than to the text's need for fluent readability, which short horizontal lines could better facilitate. Instead of emancipating itself from its material base by taking advantage of some of the empty marginal strips to 'free up' a block for writing, the inscription begins in the upper right corner of the stele, following the edges closely and filling the surface of the front side evenly

and comprehensively with lettering. There is no distinction between the text field and the background of the inscription; both are fused together into one. In order to realise this fusion of text and material carrier perfectly, a great amount of additional planning was required. Since the inscription stele tapers slightly towards the top in accordance with the usual shape of such stelae, the vertical lines of lettering had to be arranged ever so slightly in radial fashion: while the letters at the beginning of the lines almost touch each other at the top, they move apart almost imperceptibly towards the bottom.

Writing, though, can of course also use as writing supports already existing artefacts that have not (or not exclusively) been produced for the purpose of being inscribed. Several examples come to mind: sculptural works of art can be inscribed;⁸ inscriptions can be applied to buildings;⁹ and even casually discarded pottery shards can be recycled as writing supports.¹⁰ In such cases, the question of the mutual conditionality of layout and writing support arises in a different way. After all, in these instances, only the writing can be adapted to the already existing material support, which has (at least primarily) been produced to other ends. Greek inscriptions carved into the fluting of columns, for example, are an example of how the writing (or the writers) ‘searches’ for a suitable writing surface on an artefact that was not intended per se for to be written on. As much as the inscriptions in such cases respect the specifications of the artefacts used as the writing surface instead of demonstratively disregarding them à la modern urban graffiti, there nevertheless remains an element of mutual conditionality here in the relationship between what is written and the writing surface, since the chiselling of the inscription also *turns* the fluting into a line of writing. The inscription not only ‘seeks out’ a writing surface for itself, it also ‘creates’ it. This principle can be seen, for example, in the well-known votive statue of the Nike of Kallimachos from the Athenian Acropolis, which was placed on a column. The column was only double fluted—which was all that was needed for the engraving of the dedicatory inscription—while the rest of the column shaft was left rough.¹¹

The same principle of the mutual conditionality of writing and the writing surface is found much more frequently at the level of everyday culture. The shard of a broken, useless clay vessel from the middle of the Roman Imperial era depicted here (Fig. 2) only became an ‘active’ artefact of human culture again when it became the writing support for a letter. The characteristic porosity of fired clay, which in the shard’s earlier existence as an intact clay vessel was still an unexploited material affordance in this respect, now makes the shard an ideal writing surface for ink. Writing with ink, in turn, entails the use of other letter forms: Greek cursive, which differs significantly from the majuscules of chiselled Greek inscriptions.

⁸ Dietrich 2017, 298–316 (Greek); Berti/Keil/Miglus 2015, 506 (Akkadian).

⁹ On monumental inscriptions in general: Berti et al. 2017; Bolle 2020 (late antiquity). The case of Pompeii (graffiti, among other things): Lohmann 2017; Opdenhoff 2020.

¹⁰ On the so-called ostraca: Caputo/Lougovaya 2021.

¹¹ Fouquet 2020, 107–108.

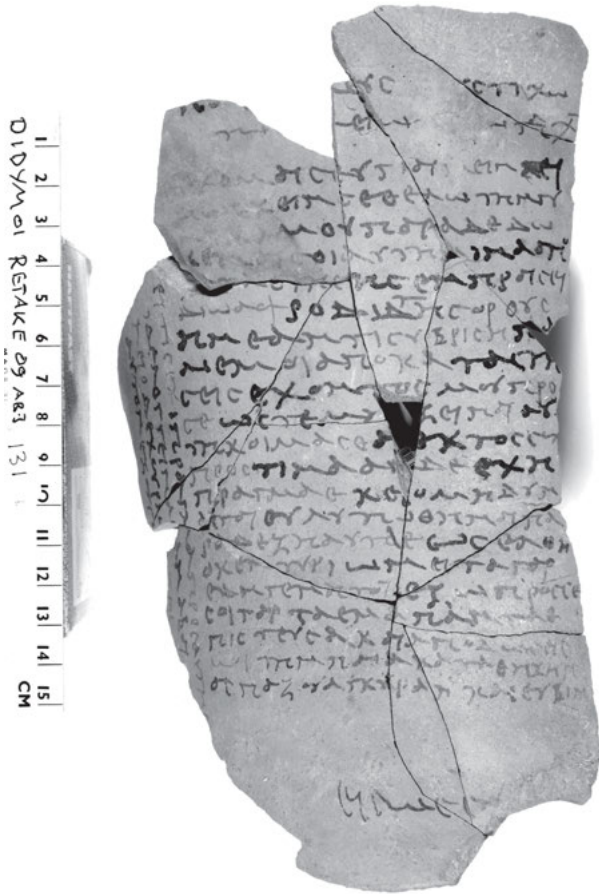


Fig. 2: Private letter on ostracon with *versiculus transversus* from the eastern Egyptian desert (Didymoi [present-day Khashm el-Menih]), ca. 115–140 CE. Original size: 17 × 21.5 cm, made of clay. O.Did. 406 (inv. no. D131 – CSA 131); Gift, Archaeological store-room Did. 131; © Adam Bülow-Jacobsen.

This artefact, extreme in its simplicity, highlights another important phenomenon in the relationship between layout and writing support. As arbitrary as the shape of the shard may be, the layout of what is written on it nevertheless reflects the characteristic elements of epistolary layout in this period, with a salutation offset at the top, a text block, and closing greetings offset at the bottom: a layout found analogously in private letters on specially produced writing supports such as papyrus.¹² Instead of making full use of the available writing space for each line from one edge of the shard to the other, care was taken to begin the line at the same height. The area left free by this was then filled with additional vertically running lines (*versiculi transversi*), but in the end this did not impinge upon the then typical layout of a letter, used here despite the support's adverse characteristics. For all the material writing support's importance for the concrete form of what is written, a certain autonomy is retained for the layout, which reveals here the text type independently of the writing surface.

¹² Sarri 2018, 112–113.

Thesis 8

The layout of what is written and the design of its characters always carry a potential for meaning.

Writing can be conceptualised as the arrangement of characters on the physical surface of an object. Writers select signs from a repertoire, give them concrete shape, and place them in spatial relationships to one another.¹³ The potential meaning of a configuration of inscriptions set up step by step in this way arises essentially from its two-dimensionality and its synoptic perception as a structured surface,¹⁴ since writing uses spatial relationships to represent contexts that are not spatial in nature: for instance (to cite the obvious, but by no means only, example), when the immediate superimposition or juxtaposition of written characters corresponds to the temporal succession of linguistic signs in spoken speech. From an aesthetic perspective of reception, writing thus has less in common with spoken language than with the image, because even though writing and reading, as the basic—although not necessarily the only!—modes of production or reception of what is written, occur in temporal succession, writing as a simultaneously perceivable two-dimensional arrangement is subject to preconditions with regard to its perception that are attributed to the image, at least according to Lessing's classic juxtaposition of image and text.¹⁵ The transition from image to writing would thus not be essential, but rather situational and functional, i. e., a question of use and perspective.¹⁶

When a written text is interpreted, the referential value of individual signs and their topologically signified relation to each other are primary, but not alone decisive, with regard to the meaning attributed to the text in question.¹⁷ The same text is interpreted differently when it is presented in a different layout, and specific information about the genre and status of the artefact, as well as relative hierarchies of its compositional elements, can be determined from the layout alone. With regard to the genre and function of an inscribed artefact, the alleged lack of a particular design can also be informative in this context. The design of characters and their arrangement in a

¹³ See here the foundational work by Cancik-Kirschbaum/Mahr 2005.

¹⁴ Krämer 2005, 32; Krämer/Totzke 2012, 16–17; from the perspective of textual linguistics: Steinseifer 2013.

¹⁵ Cancik-Kirschbaum/Mahr 2005, 101, 114. Other aspects of the spatiality of writing, such as that of “interspatiality” (“Zwischenräumlichkeit”) (Krämer/Totzke 2012, 17, our translation), are by contrast suitable for distinguishing between writing and image, with ‘interspatiality’ referring to the discrete organisation of a writing system’s signs. From this perspective, the distinction thus sets writing apart from the “continuous ‘density’” (ibid., our translation, German text: “kontinuierliche ‘Dichte’”) of the image. See also Grube/Kogge 2005, 14–16.

¹⁶ On the aspect of the pictoriality of writing (“Schriftbildlichkeit”), see in detail pp. 78–83, as well as Chapter 1, pp. 38–39.

¹⁷ Cf. Cancik-Kirschbaum/Mahr 2005, 99–101.

particular layout are thus significant and have the same capacity for representation¹⁸ as do individual characters when they conventionally stand for sounds, words, language-independent terms, or mathematical concepts.

The whole of the visually perceptible text inevitably unfolds its own potential for meaning in any interpretation as a formed and fashioned body in conjunction with the tangible and perceptible materiality of the inscribed artefact: the very physiognomy of the writing has signifying power. This potential for meaning is independent of the textual content, yet it also stands in a relationship of tension with the latter, since it can support and reinforce the text, but also undermine it. The relationship between writing and images, as well as other graphic elements, is also characterised by a reciprocal dynamism. New features can be emphasised in this interaction where images and writing complement, contrast with, or even negate each other. The ways in which the layout of writing and the design of the writing's characters represent something else—that is, how they function as signs and mean something—can be classified according to the theory of signs under the umbrellas of index, icon, and symbol.¹⁹

As an index, the written word refers back to the body of the person writing and the sequence of his or her movements. The signifying power of layout and design *qua* index is based on the fact that both—as effect or symptom—play an essential role in the process to which they point back.²⁰ Anyone who pays attention to the specific appearance of upward and downward strokes in an example of handwriting and who tracks the succession, overlapping, and interweaving of its characters will find that the concrete materiality of what is written indicates a past writing scene and allows for conclusions to be drawn about such different aspects as the direction of writing, revision steps, tools used, textual templates, the practical knowledge and ability of the person writing, but also issues such as haste or concentration and thus also the purpose of the act of writing.²¹ Here, we can think for instance of the obvious differ-

18 Aleida Assmann understands the “ability to represent” (“Fähigkeit zur Repräsentation”) as “signifying power” (“Zeichenkraft”) (A. Assmann 2015, 53, our translations) and establishes this as the *definiens* of the sign.

19 For this classic tripartite theory of signs according to Charles S. Peirce, see A. Assmann 2015, 54–56. This is not the place to elaborate a comprehensive semiotics of the design and layout of writing in non-typographic text cultures. The remarks may merely demonstrate via a rough outline—in the sense of the thesis—that there is no interpretation for which the layout and design of writing are devoid of meaning. On the semiotics of typography from a systematic and historical perspective, see Wehde 2000.

20 The decision to speak of ‘the written word’ (‘Geschriebenes’) here rather than of text or writing more generally (‘Schrift’) emphasises the indexical potential for meaning inherent to the materiality of inscribed artefacts and the design and layout of what is written, respectively; cf. Ott/Kiyanrad 2015, esp. 157–158.

21 For such an analysis based on the design of what is written, cf. Dietrich 2020 (dedicatory inscription of the early Greek statue of Nikandre on Delos). On the literary concept of the writing scene, cf. Campe 1991; Stingelin 2004 as well as other volumes of the book series *Zur Genealogie des Schreibens* edited by D. Giurato, M. Stingelin, and S. Zanetti.

ences between a completely ephemeral list of incoming goods quickly jotted down by a shipping dock overseer and an inventory of a temple's treasure that is executed and kept with great care in list form.

For the semantics of the spatial arrangement of what is written, the iconic qualities of layout and character design are decisive. Here, their signifying power arises from a formal or metaphorical similarity to the subject matter they are supposed to express or to the thing they refer to. That elaborately designed initials, a *carmen figuratum*, or even the figures of the *masora figurata*²² formed from rows of letters have an iconic quality, hardly requires detailed discussion. This may be more the case with ordinary section headings, whose semantic function is based on the metaphorical relationship of similarity between larger font size and superior (i. e., greater) meaning, as can also be observed in this present volume.²³ A relationship of similarity can also be posited, figuratively speaking, wherever a linear spatial arrangement of characters represents the temporal sequence of spoken speech, as is the case with theatrical texts such as the so-called late medieval and early modern *Dirigierrollen*, on which the directors of theatrical productions had both the text of a play and other staging information in one continuous scroll rather than a codex or book. The iconic positionality of characters here encodes the temporal dimension of another medial event. In the case of the headline, it expresses the qualification of a relationship between signs or of the knowledge represented by them.

The layout and design of written characters attain symbolic significance above all in special cases of scriptal marking, such as the use of colour codes, the marking of foreign-language words via italicisation, or the use of special (e. g., archaising) character forms as well. In all these cases, the specific semantics of the marking of selected groups of signs does not draw on any similarity between the type of emphasis and the intended distinction of meaning, as in the above example of the larger headline: there is neither a metonymic nor a metaphoric relationship between the Antiqua script/font and the Latin language. In such cases, the signifying power is based solely on a common convention or a valid rule, i. e., an ultimately arbitrary assignment, which is characteristic of symbols as a basis for meaning.

Now that we have derived our general thesis on the potential for meaning inherent in layout and the design of characters, we provide more concrete examples of this potential in the following by taking a look at the conventionality of layout, the inter-medial encounter of writing and image, and pictoriality as an essential quality of the written word.

²² Cf. Attia 2015, as well as more generally the research of the CRC's subproject B04 'Scholarly Knowledge, Drollery or Esotericism? The Masora of the Hebrew Bible in its Various Material Properties'.

²³ The same could be said, for example, about footnotes, whose marginal position on the page, together with the smaller font size, marks the discourses conducted in them as secondary to the main text; cf. on this the remarks in Krämer 2005, 36–38, as well as the self-ironic essay by Rieß/Fisch/Strohschneider 1995.

Meaningful Conventionality: In medieval manuscript culture, we find numerous examples of the potential for meaning in the layout of writing. Meaning is not only generated via extraordinary design, but also by largely inconspicuous layouts. Such meaningful conventionality already exists by virtue of the fact that the genre and function of an artefact can often be recognised by its layout, provided one understands the conventions of the respective historical context. These conventions are sometimes even explicitly presented in contemporary texts, as in the case of English administrative scrolls, the design of which was set out in detail by Fitz Neal in the twelfth century.²⁴ These scrolls were prescribed to be single-columned, unlike most books of the time. Fitz Neal even describes the characteristics of the ruling and line spacing.

Meaningful conventionality is also found in the design of individual layout elements in medieval manuscripts. Initials were often used for the purpose of marking the beginnings of a text section. Sentences that introduced or summarised a section of text were often written in red ink, while other embellishments and instances of rubrication contained certain elements that stood out in other ways. Particularly complex and expressive layout conventions are found in the frequently glossed manuscripts from the High Middle Ages. The middle of the page is occupied by the main text split over two columns, with the commentary being arranged around the main text in a smaller-sized lettering. Trained readers could immediately recognise the text type and the hierarchies of the individual elements from this widespread format, while even those who did not know these conventions in detail knew at a glance that this was the layout of a scholarly text. These examples show that one can recognise text type and function, as well as the hierarchies of the elements, without having to decipher the text's content.

Writing and Image: Questions about the layout's potential for meaning also apply to artefacts where writing and image come together, and can thus also be included in a general area of research that can already look back on a certain tradition. The perspective of a mutually stimulating interaction of textual *content* and (figurative) images – René Magritte's famous pipe, which is avowedly not a pipe at all²⁵ – has been part of the methodological toolbox of image and literary studies research in the field of *word and image studies* for quite some time.²⁶ For example, the term 'iconotext', co-coined by the literary scholar Peter Wagner, points to the reciprocal referential character of both media, which can only be understood comprehensively.²⁷ Beyond

²⁴ Clanchy 2013, 135.

²⁵ Cf. Foucault 1973.

²⁶ See, e. g., Newby/Leader-Newby 2007; Squire 2009; Gibhardt/Grave 2018; as well as the individual contributions to the ancient studies conference held in Gießen *IkonoTexte – Duale Mediensituationen* (2006), <https://www.uni-giessen.de/resolveuid/a124a1d394940c883a58345e21e92e31> (accessed 9/9/2021).

²⁷ Wagner 1995; Wagner 1996. This was already noted by Montandon 1990, 6 ("une œuvre dans laquelle l'écriture et l'élément plastique se donnent comme une totalité insécable").

the analytical categories of text and image or writing *qua* image, however, the materiality of writing as a visual design element in its own right has often gone unnoticed, and specifically with regard to its graphic arrangement, such materiality can complement or modify the generation of meaning within the image.²⁸

A particularly dense interweaving is shown, for example, by a fragmentary pediment stele from Tegea in Arcadia (Greece), which can be dated to the middle of the fourth century BCE. This stele depicts in its image field a ruling couple from Caria, Ada and Idrieus, and between them the god Zeus Labraundos, who was particularly significant for the Hekatomnid dynasty to which they belonged (Fig. 3).²⁹ The iconography leaves no doubt as to the distribution of roles: the hierarchical relation of mortals to deity is demonstrated by Ada's gesture of adoration and Idrieus's proffered greeting, but most clearly by the characteristic difference in size between the figures. All three figures are identified by onomastic inscriptions carved into the head of the stele shaft, whereby the placement above the respective figure ensures the correct assignment.³⁰ On the horizontal plane, however, a different ordering principle is revealed: by placing the inscription of Zeus's name higher than the two of the ruling couple, the layout takes up and participates in the picture's composition and its underlying concept of sacrality. Beyond this kind of production-aesthetic perspective, one can also inquire into the interaction of the layout of the writing *in* the image in the process of reception with specific attributions of meaning.³¹

The Pictoriality of Writing (*Schriftbildlichkeit*): As we have just seen, scripts and characters can enter into an exciting dialogue with figurative images in layout; but every script also has a characteristic appearance and is therefore to be understood as an 'image' in the full sense of the term. Layout proves to be a means for generating meaning not only with regard to writing *and* image, but also with regard to writing *as* image (the pictoriality of writing). Whether the iconicity of a script is highlighted or instead downplayed in the sense of a standardised layout of writing does not change this fundamental observation: every script is always also an image.³²

²⁸ As counter-examples, see for example Lorenz 2010; Gerleigner 2016; Dietrich/Fouquet/Reinhardt 2020; various contributions in Dietrich/Fouquet 2022.

²⁹ London, British Museum, Inv. 1914,0714.1; cf. Waywell 1993; Keesling 2017, 64.

³⁰ IG V,2 89: "Ἀδᾶ. | Ζεὺς. | Ἰδριεύς." On ancient epigraphs, see for example Feraudi-Gruénais 2017.

³¹ For an aesthetic perspective on the reception of writing in images, see for example Gibhardt/Grave 2018; Lorenz 2010, esp. 133–135; as well as the contributions by K. Lorenz and J. Fouquet in Dietrich/Fouquet 2022.

³² J. Assmann 2012; Watts 2013; Bedos-Rezak/Hamburger 2016; Debiais 2017; Hamburger 2011 and 2014; Krämer/Cancik-Kirschbaum/Totzke 2012; Mersmann 2015; Riccioni 2008; Roth 2010; Rehm/Simonis 2019; Frese/Horstmann/Wenig 2024. Cf. also the work and projects of the interdisciplinary DFG Research Training Group 'Notational Iconicity' ('Schriftbildlichkeit') at the Free University of Berlin (2008–2013).



Fig. 3: Pediment stele with depictions of Zeus Stratios and the Carian rulers Ada and Idrieus, middle 4th century BCE, Tegea (Greece). Width 43.2 cm, height 44.5 cm. London, British Museum, inv. 1914,0714.1 © The Trustees of the British Museum (CC BY-NC-SA 4.0).

In some cultures and religions, the pictoriality of writing is explicitly called for as an aesthetic norm and cultivated in practice, as can be seen for example in East Asian or Arabic ‘calligraphy’. In other cultural contexts, however, the pictoriality of writing can be virtually ignored or denied: the latter is especially true of iconoclastic discourses, in which writtenness has been (and still is) weaponised as an argument against proscribed images, the rebellious use of images, or ostentation more generally speaking.³³

³³ Strätling/Witte 2006, 8–9. On the Christian-influenced discourse of the Western Middle Ages: Feld 1990; Frese 2006.



Fig. 4 (double page): Godescalc Evangelistary, Fountain of Life, and the beginning of the Christmas pericope according to Matthew (Matt 1:18–19). Paris, Bibliothèque nationale de France, Ms. nouv. acq. lat. 1203, fol. 3v–4r. Worms (?), 781–783, parchment, 310 × 210 mm. Source: <http://gallica.bnf.fr>.



Of particular interest in the history of writing, however, are historical configurations in which the respective ideological position stood in tension with concrete writing praxis. This was the case, for example, at the court of the Frankish king Charlemagne (d. 814). In a famous treatise (the so-called *Libri Carolini*), the court scholar Theodulf of Orléans eloquently defended the superiority of writing over images.³⁴ In Theodulf's view, none of the great figures of scripture—Moses, David, the prophets, the apostles, even Christ himself—had ever painted; instead, they had written.³⁵ Therefore, only writing—and not images—could adequately represent the divine law. At the same time, however, splendid liturgical manuscripts were being produced at Charlemagne's court, such as the early Godescalc Evangelistary, which were adorned with pages of writing that had the appearance of magnificent paintings due to their rich colouring (gold and silver ink, purple background) and their specific layout (framing) (Fig. 4).³⁶ In this sense, it was only logical that the scribe Godescalc should emphasise in the final dedicatory poem of the aforementioned gospel lectionary that the golden letters had been “painted” (*pinguntur*) on the purple pages.³⁷

Now, it can be assumed that differences in the perception and evaluation of the pictoriality of writing in the early Middle Ages can also be traced back to differences in the percipients' respective fields of activity or profession (bishop, theologian, scribe, painter, etc.). These differences themselves, however, have to do with the tension between the character of image and sign: a tension which is fundamentally inherent in every script and which especially comes to the fore in its reception. One could simply say that in terms of their pictoriality, scripts are *seen* or *beheld*, while in terms of their being a sequence of signs, they are *read*. In this sense, research has also emphasised that in the acts of reading and decoding, the specific materiality of the information support is hidden or absorbed and that the sign-like nature of the script educates us in principle to ‘look beyond’ the form to the meaning. In its function as a medium, script can be said in an ideal manner to vanish and to refer to what is invisible.³⁸ At the same time, however, the materiality and thus the visibility of the script cannot be said to vanish, but rather remains ever present and is “resistant to a complete injection into programmes of coding and decoding”.³⁹

³⁴ *Libri Carolini*; Haendler 1958; Saurma-Jeltsch 1994; Saurma-Jeltsch 1997; Mitalaité 2007.

³⁵ *Libri Carolini* II, 30, p. 303–322; cf. Haendler 1958, 81.

³⁶ Most recently: Embach/Moulin/Wolter-von dem Kneesebeck 2019. On the Godescalc Evangelistary: Crivello/Denoël/Orth 2011; Reudenbach 1998; Winterer 2013, 79–85.

³⁷ *Poetae Latini aevi Carolini* 781 (vol. 1, 94–95).

³⁸ Strätling/Witte 2006, 9; Krämer 2006, 75.

³⁹ Strätling/Witte 2006, 7, our translation, German text: “resistent gegenüber einer restlosen Einspeisung in Programme des Codierens und Decodierens”. Susanne Strätling and Georg Witte speak here of a “tension between the sign-transcending comprehension and the perceptual resistance of the material” (again our translation, German text: “Spannung zwischen zeichentranszendierendem Verstehen und perzeptorischer Resistenz des Materials”).

This tension between visibility and invisibility is undoubtedly an essential characteristic of scripts and writing. From the perspective of visual studies and textual anthropology, however, it should be stressed that the specific pictoriality of writing not only remains ‘resistant’ to the sense of the text, but can also fundamentally co-determine and modify it. Thus, the precious colours and the ornamental splendour of the letters in the *Godescalc Evangelistary* should not be overlooked, nor is their effect exhausted in ‘pure’ aesthetic presence. Rather, the specific shapes and colours suggest meanings of their own that reinforce, complement, and soteriologically specify the textual meaning of the Gospel according to Matthew (lordly dignity, cosmology, transcendence, vitality, etc.).⁴⁰ Once again, layout as a means of ostentatiously emphasising the iconicity that fundamentally befits writing thus turns out to be the bearer of potential meaning.

Thesis 9

The layout of what is written can be significantly determined by the communicative intentions of the producers.

So far, layout has been discussed as the arrangement of writing on a given writing support. Doing so, however, has reduced the complexity of the matter by an essential element. After all, every example of writing is the result of an act of writing, and the inscribed artefact that arises through this act of production in turn gains its presence and relevance essentially through practices of reception. When production (Thesis 9) and reception (Thesis 10) are brought into the discussion of layout in what follows, we can first state that the layout of writing allows for conclusions to be drawn about the conditions of its production and the intended reception. The fact that we first pay attention to the production side of things takes into account the fact that under the conditions of non-typographic text cultures that lack mechanised reproduction techniques, each individual piece of writing is based on its own act of production, in which the layout of the writing and the design of the characters can and must always be determined anew.

This becomes clear when looking at medieval codices and the practice behind copying.⁴¹ The creation and thus the appearance of a manuscript are directly dependent on the actors involved in the production process—the commissioners, scribes, painters, rubricators and/or proofreaders—and conclusions about the intentions of these various agents can be drawn from the layout of such a book. This can be seen particularly well in different copies of the same work, if they are largely similar in

⁴⁰ Cf. the corresponding notes on the *Hillinus Codex* (also called the *Hillinus Evangelistary*) in Cologne, by Rehm/Simonis 2019, 10–11.

⁴¹ Gertz et al. 2015.

the wording of what is written, but differ greatly in their layout. The layout decisions made by the producers of each individual copy have a guiding effect on the reception process by communicating to the recipients *how* the text is supposed to be read and *as what*.

One Middle High German text on behaviour and etiquette, *Der Welsche Gast* ('The Italian Guest'), for example, survives today in 24 manuscripts,⁴² all of which can be traced back in varying degrees of relationship to a single manuscript that is now lost.⁴³ In the work, written in 1215/16 by the Italian cleric Thomasin von Zerklare and copied and distributed for almost 250 years, the text remains nearly the same across all extant copies, but these copies differ considerably in size, material, layout, and character/script design.⁴⁴ In the oldest and at the same time smallest surviving manuscript (A), the text was written in Gothic minuscule in a single column (Fig. 5a). The coloured pen drawings of the picture cycle accompanying the text are located in the margins and are mostly rotated 90 degrees with respect to the writing. Book beginnings are marked with simple red headings and split-bar initials. Although it was also written in Gothic minuscule (albeit in two columns), the manuscript (E), one hundred years younger than A, contains much richer and more ambitious decoration (Fig. 5b).⁴⁵ The miniatures are painted in opaque colours, decorated with gold, and framed by ornamental borders. In contrast to manuscript A, these are inserted in E into planned recesses in the body of the text, so that they are assigned to fixed passages therein. Accordingly, the copyists do not allow any leeway in the text-image relationship through the page design, as is the case with the rather loose connection in manuscript A. Different types of major and minor initials, as well as the presence of *litterae florissae* and *litterae notabiliores*, result in a hierarchising, clearly more stringent visual structure of the text.⁴⁶ Based on layout and design, the manuscript can be attributed to the workshop of Kuno of Falkenstein, whose skills are exemplified in this magnificent codex.⁴⁷ The paper manuscript (b), produced in the fifteenth century, has a completely different appearance with the same content (Fig. 5c). The text is written in two columns in bastarda, with the wash pen drawings being fitted unframed into the text column, partly reduced in terms of the objects or figures in the individual motifs for reasons of space

⁴² All surviving manuscripts of *Der Welsche Gast* can be found as digital copies at: <https://digi.ub.uni-heidelberg.de/wgd/> (accessed 6/3/2023). For the following, cf. also the publications of the CRC's subproject B06 'Material Presence of the Scriptural and the Practice of Iconographic Reception in Mediaeval Didactic Poetry. Text-Image Edition with Commentary of *Der Welsche Gast* by Thomasin von Zerklare', <https://thomasin.materiale-textkulturen.de/publikationen.php> (accessed 6/3/2023), most recently Schneider et al. 2022.

⁴³ Manuscript stemmata providing information about the relationships can be found in Kries 1985, 154 (<https://doi.org/10.11588/diglit.52821#0168>) and Horstmann 2022, 315.

⁴⁴ Ott 2002.

⁴⁵ Ott 2002, 35.

⁴⁶ Wolf 2018.

⁴⁷ Ronig 1984; Roland 1991.

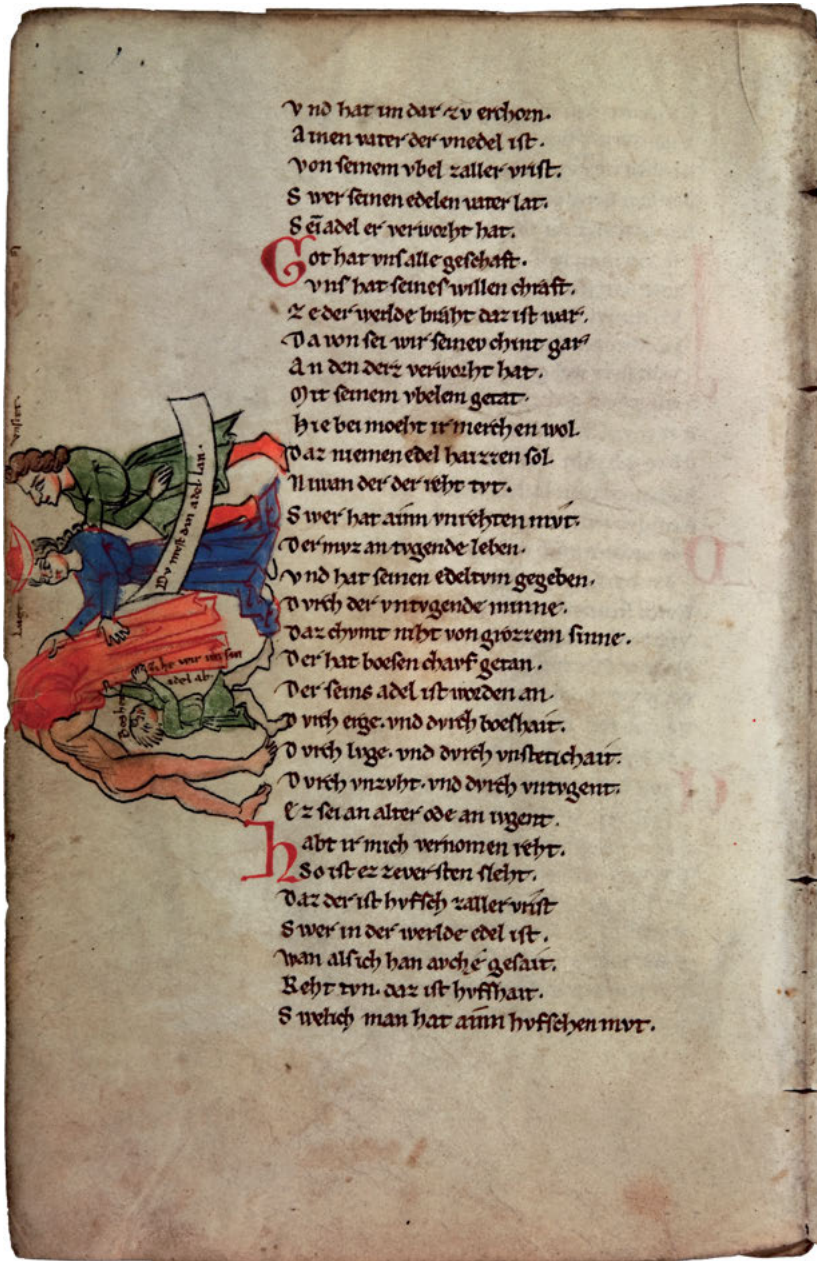


Fig. 5a: Thomasin von Zerklare, *Der Welsche Gast*. Motif 69: 'The vices strip a nobleman of his nobility like a dress'. Heidelberg, University Library, Cod. Pal. germ. 389, fol. 61v. Carinthia, ca. 1256, parchment, 225 leaves, 18.1 × 11.5 cm. Text in Gothic minuscule, one hand; 106 coloured pen-and-ink drawings, three illuminators, two illuminators. Single column, structured by rubricated highlight initials. Miniature at the page margin, rotated 90 degrees to the text.

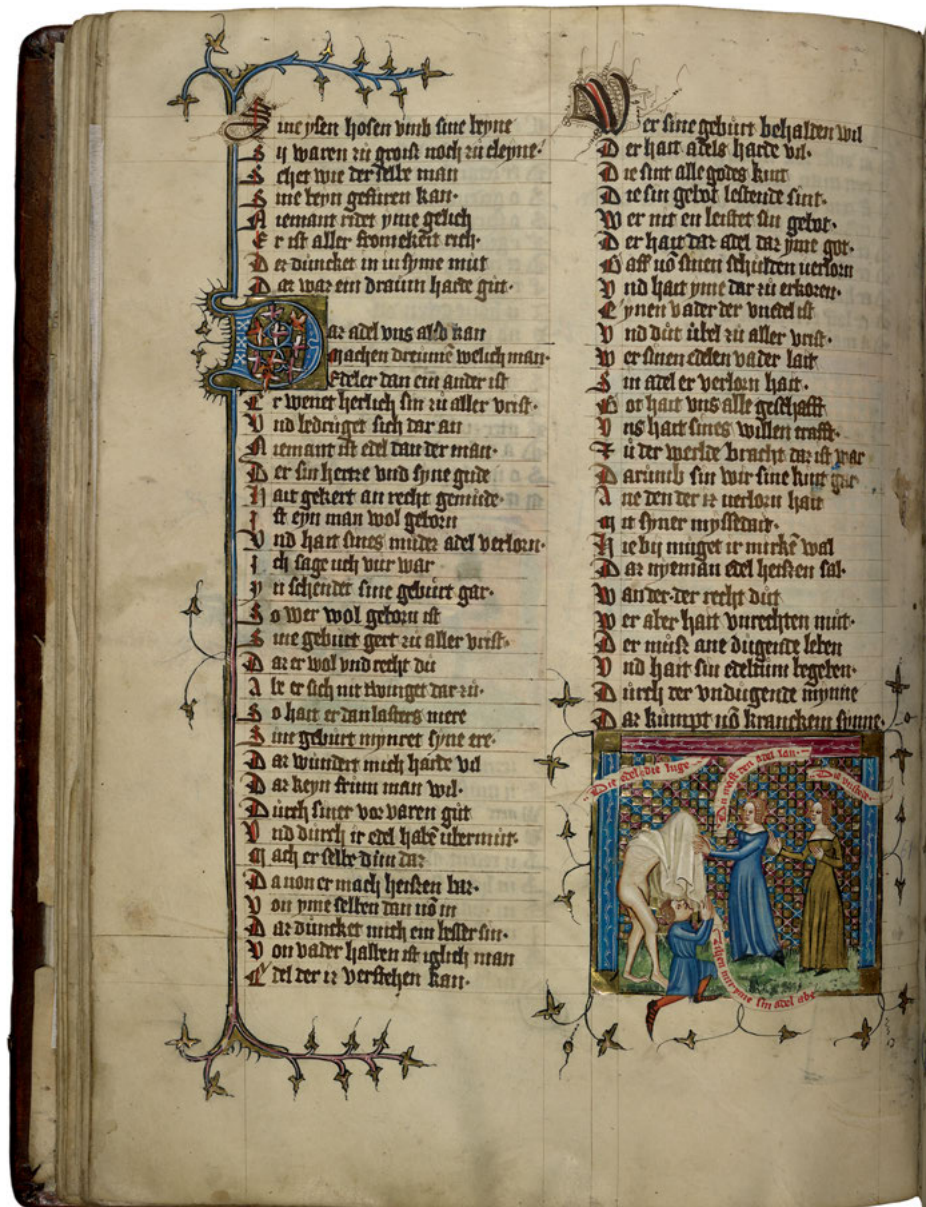


Fig. 5b: Thomasin von Zerclaere, *Der Welsche Gast*. Motif 69: 'The vices strip a nobleman of his nobility like a dress'. New York, The Morgan Library & Museum, Ms. G. 54, fol. 24v. Trier (?), workshop of Kuno von Falkenstein, ca. 1380, parchment, 74 leaves, ca. 35.4 × 25.6 cm. Text in Gothic minuscule, one hand; 72 miniatures framed by ornamental borders, presumably one illustrator and one illuminator. Two columns, structured by a colour field initial (D) with a golden background, floral interior field fillings and vine-like extensions flanking the text area, decorative initials at the top of the page with cardels and human profile. Miniature in a reserved space in the text field, golden frame with red and blue filling and vine-like extensions.

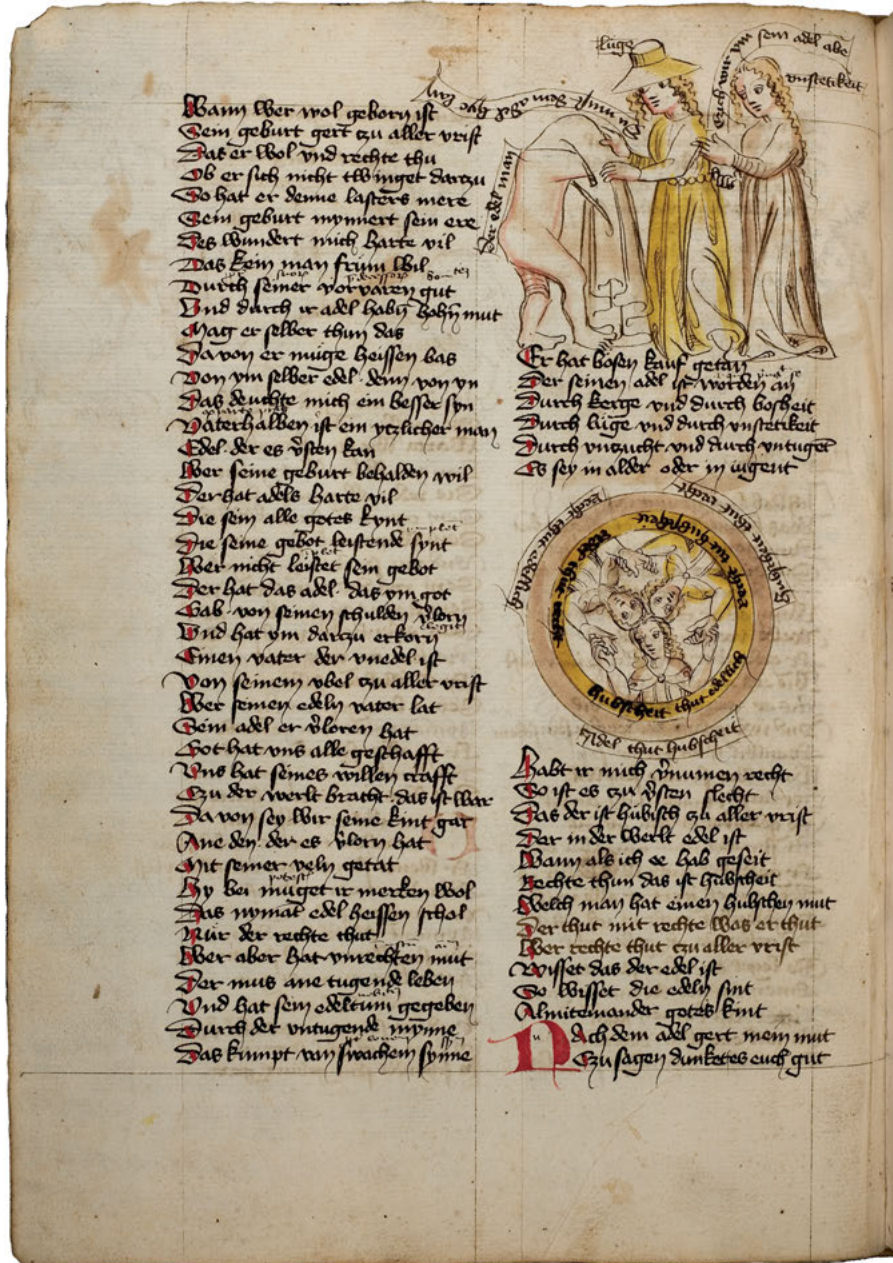


Fig. 5c: Thomasin von Zerklare, *Der Welsche Gast*. Motif 69: 'The vices strip a nobleman of his nobility like a dress' and motif 70: 'Interconnectedness of law, nobility and courtliness'. Heidelberg, University Library, Cod. Pal. germ. 330, fol. 33v. Eichstätt (?), ca. 1420, paper, 104 leaves, ca. 31.2 × 21.8 cm. Text in bastarda, one hand, Latin and Czech interlinear glosses; 113 wash pen drawings, probably by one hand. Two columns, structured by rubricated highlight initials, miniatures inserted into the text column without frames.

compared to the other manuscripts, and with the text proper being accompanied by interlinear glosses in Latin and Czech. The fleeting, probably incomplete execution of the picture cycle and the addition of the selective translation of the text indicate an intended use in the production as a textbook for German lessons.

The copyists thus adapted the appearance of the respective manuscript to changing circles of recipients, styles, workshop conventions, client wishes, etc. Layout and design can therefore render visible changes in the situations of use and design demands.⁴⁸ One could say that the producers communicate with the recipients by means of the layout, for example, by showing off their abilities or by suggesting a certain way of reception that is different from that of the original.

In manuscript production, processes of standardisation can also be observed within workshop circles. Such processes usually serve to increase efficiency but can also lead to layout and design becoming the distinguishing feature of a production site. Regardless of the texts passed down in them, the manuscripts of such workshops then appear quite uniform in layout. Manuscripts from the workshop of Diebold Lauber in the fifteenth century, for example, show a uniformity in design that includes a representative format, standardised text structure and layout, indices of numbered chapters, and red chapter headings as well as large-format, mostly full-page illustrations, all of which serves to increase the recognition of the responsible producers. This standardised layout becomes the hallmark of the workshop and the manuscripts produced there become recognisable ‘name-brand merchandise’ for the recipients.⁴⁹ In this way, the producers use the layout and design to communicate to the recipients or potential buyers of the books that they were produced in a capable workshop.

These considerations lead to our thesis set out above: The layout of what is written can be significantly determined by the communicative intentions of the producers.⁵⁰ This begins in part already with the selection of the audience addressed in the layout: the person or group of persons who affixes a text to a writing support (or has it affixed) can use the layout to deliberately enigmatise and encrypt the content in such a way as to exclude those recipients who do not command the corresponding specialist knowledge. This applies, for example, to the late antique figure poems (*carmina figurata*) in the form of lattice poems, which render a second text legible through the arrangement of the letters of the first one (*versus intexti*).⁵¹ Such attempts at encoding can also be found in some Ashkenazic manuscripts up to the thirteenth century.⁵² From here, the

⁴⁸ Horstmann 2022, 2. The different use of text-structuring elements in the manuscripts of *Der Welsche Gast*, i. e., different initials, script design, headings, and other special features in the text that provide a visual framework and direct the reader’s eye, is described by Starkey 2022.

⁴⁹ Saurma-Jeltsch 2014.

⁵⁰ For the premises of communication, see Chapter 1, p. 35–37.

⁵¹ Squire/Wienand 2017. On figure poems of classical antiquity: Pappas 2012.

⁵² See Attia 2015; Liss 2018 and 2021; Halperin 2021.

transition to a layout that is an expression of virtuosity and is intended to impress both viewer and reader is a smooth one. Emphatically artistic layouts, such as those found in the figure poems of late antiquity or the *Masora Figurata* illustrations of later Ashkenazic and Sephardic biblical manuscripts from the fourteenth century onwards (and which clearly stand out from standard productions of the same period), presuppose that the poets or visual artists have thought about the layout ahead of time and make clear their intention to communicate their own technical and artistic abilities to the recipients via the layout.

A self-reflexive moment of layout can come into play especially when a scribe or painter designs his or her own name. For example, Jan van Eyck's signature in his *Portrait of a Man* demonstrates that he is able to imitate various types of writing on different materials or create them himself (Fig. 6).⁵³ The writing support in the painting is an old and chipped stone parapet. On it, the painter writes his name in white paint in what looks to be a kind of handwriting, a chancery script typically written with a pen in documents. He thus evokes a legal act, just as he does with the unusual formulation "Actum [...] a [...]" instead of the more commonly encountered term *fecit* in signatures.⁵⁴ Another French inscription in Gothic majuscule ("LEAL SOUVENIR") simulates chiselled letters. Finally, above it, in the centre of the parapet in white paint and Greek capital letters, is the inscription TYM. ΘΘΕΟC, which has been interpreted by some as the name of an ancient musician or sculptor, and thus referring to the sitter's profession, or as a combined Latin-Greek text but written solely with Greek letters ('TUM OTHEOS' = 'then God').⁵⁵ Oil painting, at once both a technique and a medium, and the brush as instrument, are pushed to the creative limits here in the imitation of different types of material and script. The expectations associated with the layout are simultaneously raised and dashed by the painter's virtuosity. The sculpted inscription is painted, and via the fictitious material, it creates the impression of a name having been inscribed onto a monument. This association is contrasted with the expression,

⁵³ London, National Gallery, oil on wood, 33.3 × 18.9 cm. The signature reads: "Actu(m) an(n)o d(omi)ni 1432 10 die octobris a ioh(anne) de eyck". The elaborate staging of the signature is particularly striking here, since Jan van Eyck was one of (if not *the*) first painter in the Netherlands to sign panel paintings; see Gludovatz 2005, esp. 118. Writing is additionally thematised in this portrait by the scroll (?) that the sitter holds in his hand: Surprisingly, the writing—fictitious (Campbell 1998, 218), and in any case illegible—is applied to the outside. On the inscriptions of the painting, see Fruhstorfer 1987 (with the correct observation that the white inscriptions are independent of the painted damage to the stone; the temporal course of the application would thus also have to be considered); Paviot 1995; Harbison 2012, 246–247.

⁵⁴ Among others: Wood 1978, 653.

⁵⁵ Alluding to the musician Timotheos of Miletus, Panofsky among others identified in 1949 the man in the painting as the musician and composer Gilles Binchois, a member of the Burgundian court chapel. Wood 1978, 650, agreed that 'Timotheus' did not directly name the sitter and argued with the layout: the writing was too inconspicuous compared to the artist's signature, being small and devoid of embellishment. For an overview of the numerous attempts at identification, see Campbell 1998, 220 (see here 222 for the reading as Latin words).



Fig. 6: Jan van Eyck, Portrait of a Man (so-called Timotheos). London, National Gallery, 1432. Oil on wood, height 33.3 cm, width 18.9 cm. © The National Gallery, London.

which could be a motto or a specific call to ‘faithful remembrance’. There is no real deception here—the viewer is not left in the dark about the fact that he or she is standing in front of a painting—but the painter plays with perception, expectations, and knowledge via the layout.⁵⁶ While the individual bits of textual content remain hazy in their meaning and seem almost enigmatic, the painter uses the layout and the multitude of script forms on display, together with the writing implements and the material writing support suggested by them, to communicate very clearly to the recipients his level of ambition and his expectations vis-à-vis an educated audience.

Not only on the part of the executing artist, but also on that of the client, is it possible for a special level of aspiration to be manifested through layout and conveyed to the recipients, with this being the case both independently of the content of the recorded text and in tandem with the aim of underscoring certain references to meaning. Precious materials, contrasting colours, and the underlining of text were chosen not only to emphasise individual names, but also to create visually meaningful references that suggested—in addition to an element of prestige—not only human interaction, but also a proximity to the divine. In the medium of ancient and late antique mosaic inscriptions, for example, this could be accomplished with glass tesserae (small glass cubes or cuboids) covered with gold foil. They were rarely used for floor mosaics because of their fragility and cost-intensive production, so it was all the more conspicuous when they were in fact used in such settings. In the Church of St Paul in Philippi, Macedonia, built in the fourth century, an inscription in the eastern section of the nave refers to the activity of Bishop Porphyrios, who had outfitted the church with mosaics in the name of Christ.⁵⁷ Gold glass tesserae against a grey background were used to emphasise in striking manner the names of Christ, Paul, and Porphyrios. They make visible to the viewer the decorative cost and effort, but also visually connect the person of the donor with the sphere of the sacred, represented by the apostle as well as Christ himself. The remaining words of the inscription were set in stone tesserae of blue colour against a white background, with only the word ἐν (‘in’) appearing in red, probably in order to emphasise the donation’s reference to Christ.⁵⁸

The sheer size and length of inscriptions also convey a special claim on the part of the client via their good visibility and the physical effort required to read them. The five inscriptions on the church of San Matteo and the palace facing opposite in Genoa, which celebrate the battle victories of admirals hailing from the Doria family, obviously involved a great deal of financial and organisational planning and effort.⁵⁹

⁵⁶ How all this is to be connected with the person of the sitter remains controversial; see among others Dhanes 1980, 182–184; Rehm/Simonis 2019, 12–13.

⁵⁷ Philippi, Archaeological Museum, Δ 15.265; SEG 27, 304: “Πορ[φύ]ριος ἐπίσκο- | πος τῇ[ν κ]ἐντήσιν τῆς βασιλικῆς | ς Παύλου[ν ἐπ]οίησεν ἐν Χρ(ιστ)ῷ” (‘Bishop Porphyrios made the mosaic of the Basilica of Paul in Christ’). See also Pilhofer 2009, 394–396 n. 329/G472; Leatherbury 2020, 42, 44, 46; Dadaki 2011; Pelekanides 1975, 101.

⁵⁸ Leatherbury 2020, 42.

⁵⁹ Müller 2002, 126–133.

each inscription runs along layers of Carrara marble in only three lines of text, but these lines are more than nine metres long. It would have been simpler from the point of view of both the planning and the execution—not to mention the cost—to place the inscriptions (as was otherwise customary in Genoa) on a few higher stone slabs and to use smaller letters. The low but long inscriptions are likely not only to have attracted attention due to their unusual layout, but they can also be seen from every vantage point on the facing piazza due to their coursing across the entire façade of the church or palace, respectively. The claim fundamentally associated with the medium of monumental inscription⁶⁰—in this case, that of the noble Doria family vying for leadership in Genoa—is thus conveyed to a wide gamut of people, while only a laborious and time-consuming walk along the façade makes the content of the texts intelligible. The aesthetic guidelines, which are clearly controlled here by the client, thus broaden the spectrum of perception and appear to be situated entirely in the service of the family and its agenda.

Thesis 10

Layout offers different reception practices.

As shown in the last thesis, the producer determines through the layout and design of what is written the reception and thus also the form of such text to a decisive extent.⁶¹ The layout and design can increase the legibility of a text, direct the reader's eye, and offer up interpretations, but they can also obscure such readability to the point of illegibility.

In the course of the eighth-century Carolingian educational reforms, for example, a large number of codices were produced that reveal a striving for clarity and unambiguity in their design. In addition to the introduction of a general script—namely, the Carolingian minuscule, which replaced the regional scripts of individual writing centres—how folios were designed also bears witness to these aspirations for uniformity.⁶² Copied texts were transferred into a new layout that visually structured the text for the reader and was legible across regional borders. In addition to the Carolingian minuscule as a script for text, ancient majuscule scripts were used for writing especially emphasised words or lines of text. A fixed hierarchy of scripts even emerges:⁶³ for book and chapter titles, text incipits, and colophons, a regular ranking of *capitalis quadrata*, uncial, and semi-uncial scripts is evident, with *capitalis rustica* also being

⁶⁰ Foundational here are Petrucci 1986; Bartoli Langelì/Giovè Marchioli 1996.

⁶¹ Ast/Attia/Jördens/Schneider 2015.

⁶² Further characteristics of the new Carolingian aesthetics in design are provided by Tino Licht, who cites the example of the scriptorium at the imperial abbey in Lorsch (present-day Germany) near Worms, cf. Licht 2013.

⁶³ Job 2013.

used for incipits, explicits, and running titles. In the Carolingian Renaissance, the correct understanding of Holy Scripture and other texts was a prerequisite for correct faith: whoever did not understand the words of Scripture and reproduce them correctly opened themselves up to the danger of heresy. In this context, the understanding of the content of the text already takes as its starting point the text's legibility.⁶⁴

Moreover, a specific layout can also facilitate specifically intended copying processes.⁶⁵ The so-called Pipe Rolls or Great Rolls of the Exchequer, in use since the twelfth century for recording administrative audits in England, are individual parchment rotuli that were tied together at the heads and rolled up. The horizontal arrangement of the text on the rolls follows the logic of accounting. In this context, the large spacing left by the scribe not only testifies to an intended clarity of these documents, but also facilitated copying by dividing the documents into individual sections.⁶⁶

However, an increase in legibility is not the only effect layout can have on text; it can also lead to textual illegibility. Accordingly, the design can suggest a reception that obviously does not see an actual 'reading' as the first and most important possibility of reception. The presence of writing that is restricted by different means of design or spatial arrangement can obscure the recognisability of the characters themselves. For example, the golden writing on an ornamental page of the Guntbald Gospels, produced at the beginning of the eleventh century, is hidden behind vine-like ornamentation that is likewise in gold and resembles the shapes of the letters.⁶⁷ Effortless reading was not intended in this case: the page was simply meant to be looked at first.⁶⁸ The famous Chi-Rho page of the Book of Kells from around 800 also impressively shows⁶⁹ that the design of the writing on the purely visual level illustrates invisible Christian mysteries through the visible and at once inseparable entanglements of script, image, and ornament in the masterful way the Christ monogram is decorated almost beyond recognition.⁷⁰ For the recipient, such splendid pages in a manuscript seem visually impressive at first; the text can only be read out from within the image(ry) on closer inspection. Beholding the page, marvelling at what one sees, looking closely and gazing at the sight are all reception practices provoked above all by the design of what is written.⁷¹

Finally, one of the reception practices that laid-out text can encourage is also the act of writing. Such practices are already taken into account in the layout when deter-

⁶⁴ Scholz 2015, 280–281.

⁶⁵ Kypta 2015 explicitly examines the uses of the Pipe Rolls based on their layout.

⁶⁶ Kypta 2015, 281.

⁶⁷ Dom- und Diözesanmuseum Hildesheim, inventory no. DS 33, fol. 88v; see also: Frese 2014, 4–5. On 'Enigmatic Calligraphy' in early medieval gospels, see Reudenbach 2021.

⁶⁸ Becht-Jördens 2014 shows different modes of how medieval characters were received.

⁶⁹ Dublin, Trinity College, Ms. 58. A digitised copy of the manuscript can be viewed online at: <https://doi.org/10.48495/hm50tr726> (accessed 4/11/2022).

⁷⁰ Lewis 1980.

⁷¹ Becht-Jördens 2014.

mining the typeface. The often astonishingly wide margins left around the central text block in medieval codices, despite parchment being an expensive writing material, fall in line with the usual practice of writing commentary.⁷² The blind ruling of the blank page already determines its division into spaces allocated for the text proper, pictorial elements, and commentary (Fig. 7),⁷³ with the actual text only taking up part of the page. Both the columns surrounding the text as well as the enlarged line spacing provide space for comments and interlinear glosses. The layout of early modern writing calendars is explicitly intended for the addition of handwritten notes: these were annual calendars that emerged in the printing age with the invention of letterpress printing with movable type (sixteenth century).⁷⁴ They consist of a calendar for the twelve months of the year, with each calendar page juxtaposed with a blank one on which handwritten notes can be made. Within the calendar, knowledge of an astrological and medical nature together with everyday know-how for practical living is correlated to the individual days of the month, so that the best dates for bloodletting, haircuts, or marriage can be identified, for example.⁷⁵ On the pages for writing, which are either simply blank⁷⁶ or else marked out by the layout with a specific field for writing, the calendar writer can record personal experiences, plan appointments, or reflect on what he or she has experienced. Writing calendars are therefore equipped with a specific affordance through their print layout: handwritten notes are explicitly anticipated and taken into account.

However, layout specifications can also be undermined, whether by contemporaries or via new uses and re-uses at a later point in time, such that the approach of the history of reception can prove fruitful. This approach focuses less on the recipients conceived during production than on the historical audience, the users of an artefact and how they have dealt with and handled it.⁷⁷ This shows that intended modes of reception were not always realised. The users of the writing calendars, for example, sometimes had a very idiosyncratic way of dealing with the writing fields provided. In some surviving copies, one can observe how the designated writing fields remain empty and handwritten entries are only present at the bottom of the page, below the text field.⁷⁸ The relationship between handwriting and printing, or the constraint of the handwriting to the space indicated by the printing, varies both quantitatively and qualitatively.

⁷² Different types of books can be provided with wide margins for such a productive reception: glosed Bible manuscripts (de Hamel 1984), legal codices (L'Engle/Gibbs 2001), encyclopaedic manuscripts (Meier 1997), or codices used in teaching (Wimmer 2018).

⁷³ On lining and page division, see also: Schneider 2014, 128–139.

⁷⁴ Cf. Tersch 2008, 19–21.

⁷⁵ Cf. Landwehr 2014, 22.

⁷⁶ On the subject of blank space, cf. Brendecke 2005, 91–105.

⁷⁷ See the overview under 'Rezeptionsgeschichte' (history of reception) in the *Metzler Lexikon Kunstwissenschaft* (ed. by Pfisterer 2011) as well as in the anthology of Bell et al. 2021.

⁷⁸ E. g., the calendar with the shelfmark 4° Nw 2404 [1571] from the library of the Germanisches Nationalmuseum, writing page for April.



Fig. 7: Aristotle, *Opera varia. Metaphysica cum glossis*, Berlin State Library—Prussian Cultural Heritage Foundation (SBB-PK), Department of Manuscripts and Early Printed Books, Ms. lat. fol. 286, 1300, 111 leaves, fol. 37r. Public Domain Mark 1.0.

The layout and design of writing can increase legibility and thus facilitate the reading, understanding, or copying of a text in its reception. Yet these elements can also evoke reception practices that do not suggest reading as the first and most important task: inscribed artefacts, through their design, encourage successive decoding upon intensive viewing, in which potential meanings are not confined to the textual level alone but may also be grasped through a different kind of reception. Furthermore, layout and design can influence how an artefact is handled, in that the recipient must follow a certain procedure in order to grasp what is written. Finally, the layout of inscribed artefacts can also invite additional writing: as a mode of reception intended by or independent from production, and in ways conforming to the layout or undermining it.

Thesis 11

On multiple levels, layout and text type stand in a close connection that can be influenced from various sides.

When we look at layout, we can often immediately identify the type of text we are dealing with: a receipt with goods and prices listed; a poem with line divisions; a scholarly book (like this one) with a table of contents, section headings, and bibliography. In fact, layout sometimes defines text type: the specific formatting together with certain paratexts may indicate that a text is a letter, for instance. But what exactly is meant by ‘text type’? Whereas the term ‘genre’, as it has traditionally been understood, refers to a group of texts from a specific cultural and epochal context with certain common characteristics (for example, ancient Greek funerary inscriptions), ‘text type’ as a transcultural term is not related to any specific time or culture (for example, funerary inscriptions from antiquity to the present day).⁷⁹ The scientific, text-linguistic classification of texts into text types is fluid, broader, and ascertainable by a variety of criteria: characteristics and styles (descriptive, normative, informative, cognitive, aesthetic, etc.); the entities that produce the texts (individuals or institutions); the classes to which texts are assigned from an emic or etic perspective (letters, dedications, lists, administrative documents, poems, etc.); or even the medium itself.⁸⁰ These different criteria by which text types are classified can help to differentiate some of the content-based categories commonly used in the study of historical texts: a ‘letter’ may be written by an administrative, commercial, or religious institution; it may be informative as a personal communiqué, descriptive as a piece of administrative correspondence, or normative as an order from a superior. It can be an entirely fictional letter embedded

⁷⁹ Fricke 1981, 132–138; Kubina 2018, 151–152.

⁸⁰ Gansel/Jürgens 2009.

in a narrative, or a real letter containing a poem. Even though all these representatives of the text type ‘letter’ differ fundamentally according to content criteria, they can all emulate the same basic layout.

The process of developing a standardised layout associated with a particular type of text can be gradual or rapid, the result of institutional requirements (‘top-down’) or a self-propelled process (‘bottom-up’). The standardised layouts that result from this process depend on a variety of factors: the nature of the writing supports, usability issues, or even the writing system itself (left-to-right, top-to-bottom, logographic or alphabetic, etc.).⁸¹ For example, texts on coins, seals, and gems are typically short and/or closely associated with images due to the limited space available. In the case of scholarly texts, it is the user orientation that led to the development of layout elements such as large headings, rubrication, numbering, and the offsetting of section beginnings in the European Middle Ages. Decisions about layout are often not made by the authors of the texts themselves, but may be at the discretion of scribes, stonemasons, artists, patrons, or intermediaries. For example, the decision to leave large blank spaces in a manuscript could be made by a client or administrator who wanted to write extensive marginal notes in the book or fill in the gaps deliberately left in an administrative account (cf. Chapter 6 ‘Political Rule and Administration’), or it could be the decision of a scribe who wanted to show the importance of the text by means of this valuable ‘wasted’ space. As different as the actors involved and the driving factors of development may be, at a certain point a conventional layout, if not indeed a normative arrangement, emerges that is expected of a particular text type within a cultural group regardless of any further developments.

Some text types have had consistent layouts across wide geographical and temporal expanses. Postal arrival notices in Chinese administrative records written on the back of bamboo or wooden slat scrolls from the third century BCE to the first century CE had a fixed layout (Fig. 8).⁸² In later copies of such notes, the arrival notes were prescribed as cloze text, or never even filled in. One of the possible reasons for this practice could have been the efforts to make the writing recognisable as an official document. However, this layout would only have had signal value for the staff who were familiar with the practice of such arrival notices. This information contained in the standardised layout would thus be exclusive, but not personal.

In other cases, this extra-textual information from the layout was accessible to the general public within a cultural area. Ancient Roman laws and decrees were often publicly displayed engraved on bronze tablets. The layout of such public copies was highly standardised, which required central organisation of the drafting process.⁸³ A consistent and orderly layout suggests institutional control over the materials and

⁸¹ Ast/Attia/Jördens/Schneider 2015.

⁸² For the image of Juyan no. 506.9b, see *Juyan Han jian*, 155; for Wuyiguangchang no. 412b, see *Changsha Wuyiguangchang Dong Han jian*, 88.

⁸³ Decorte 2015, 253.



Fig. 8a (left): Chinese wooden strip from Juyan, with the inscription: 十月壬戌卒周平以來; 即日齋夫尊發尉前 ('In the first year of the Yuanan reign, in the tenth month, which began with a *jiawu* day, on the *wuwu* (twenty-ninth) day, soldier Zhou Ping presented this document; on the same day, overseer Zun opened this document in front of the commander.'). 12 BCE, 21.9 × 2.4 cm. Juyan, no. 506.9B (inv. no. H11678). © Courtesy of the Institute of History and Philology, Academia Sinica, Taiwan; Academia Sinica Centre for Digital Cultures (CC BY-NC-ND 3.0 TW).

Fig. 8b (right): Chinese wooden strip from Wuyi Square, with the inscription: 正月日郵人以來; 史白開 ('On [gap] day of the first month, the postman presented this document; the scribe [gap] reported and opened this document.'). 110 CE, 23.4 × 3 cm. Wuyiguangchang, no. 412B (inv. no. 2010CWJ1③:201-21), © Changsha Municipal Institute of Cultural Relics and Archaeology.

methods of textual production, thus conveying authority. The case of the *Res Gestae* of the first Roman emperor Augustus illustrates these ideas. Augustus's autobiographical account of his achievements was carved into a temple wall in a mainly Greek-speaking city, in both the original Latin text and a Greek translation. The question arises as to why the effort was made to also make a copy of the Latin text available to a Greek-speaking audience. Even if the inscription appeared as a kind of *lorem ipsum* or nonsensical text to the viewers, the inscription written in the language of the Roman centre of power nevertheless conveyed authority through the presence of a heading in large letters and the division of the text into columns, both characteristics of official government documents in this period.⁸⁴ The layout of magical writings (curses, prayers, fortune-telling, etc.) by private individuals or ritual specialists often has a comparable signal character, albeit working with contrary means. Here, traditional layouts are often almost entirely avoided, in accordance with the alterity of the texts and their intended readers, namely (according to modern understanding) supernatural powers.⁸⁵ Magical texts found on a multitude of artefacts from the ancient Mediterranean, for example, often used curved lines, changes in writing direction, and texts in 'image form' to communicate with the beyond.⁸⁶

However, the correspondence that can frequently be observed between text type and layout does not apply without exception. This is the case, for example, with a demotic wisdom text that has been preserved in several manuscripts containing identical texts but different layouts, including the Insinger papyrus from the first century BCE (Fig. 9). The text consists of a series of maxims grouped into numbered chapters, each of which has an overarching theme, although the individual maxims contained therein rarely refer to one other. On the Insinger papyrus, this content structure is also reflected in the layout: each maxim is written on a single line.⁸⁷ This makes it possible to identify individual maxims quickly and structure the flow of reading. But not every manuscript in which this text has been preserved has this same layout. In the Carlsberg 2 papyrus, for example, the individual maxims are partly separated from each other by empty spaces and are not always accorded a single designated line. In this manuscript, however, the chapter numbers are highlighted in red ink, which makes it much easier to find where each chapter begins.⁸⁸

The lack of correspondence between text type and layout is of particular interest when the typical layout of *another* text type has been deliberately followed. In the Han period in China (202 BCE–220 CE), for example, ritual texts such as the *Letter to the Underworld* sometimes adopted the form of administrative writings by imitating their

⁸⁴ Roels 2018; Sitz 2019.

⁸⁵ Kiyannrad/Theis/Willer 2018. See also Chapter 5 'Sacralisation'.

⁸⁶ Faraone 2012.

⁸⁷ Lichtheim 1983, 109–112.

⁸⁸ Quack 2019, 422–429; on the use of red ink in Egyptian texts, see Ast/Jördens/Quack/Sarri 2015, 310–311; on the influence of visual form on legibility, see Berti/Haß/Krüger/Ott 2015, 641–642.

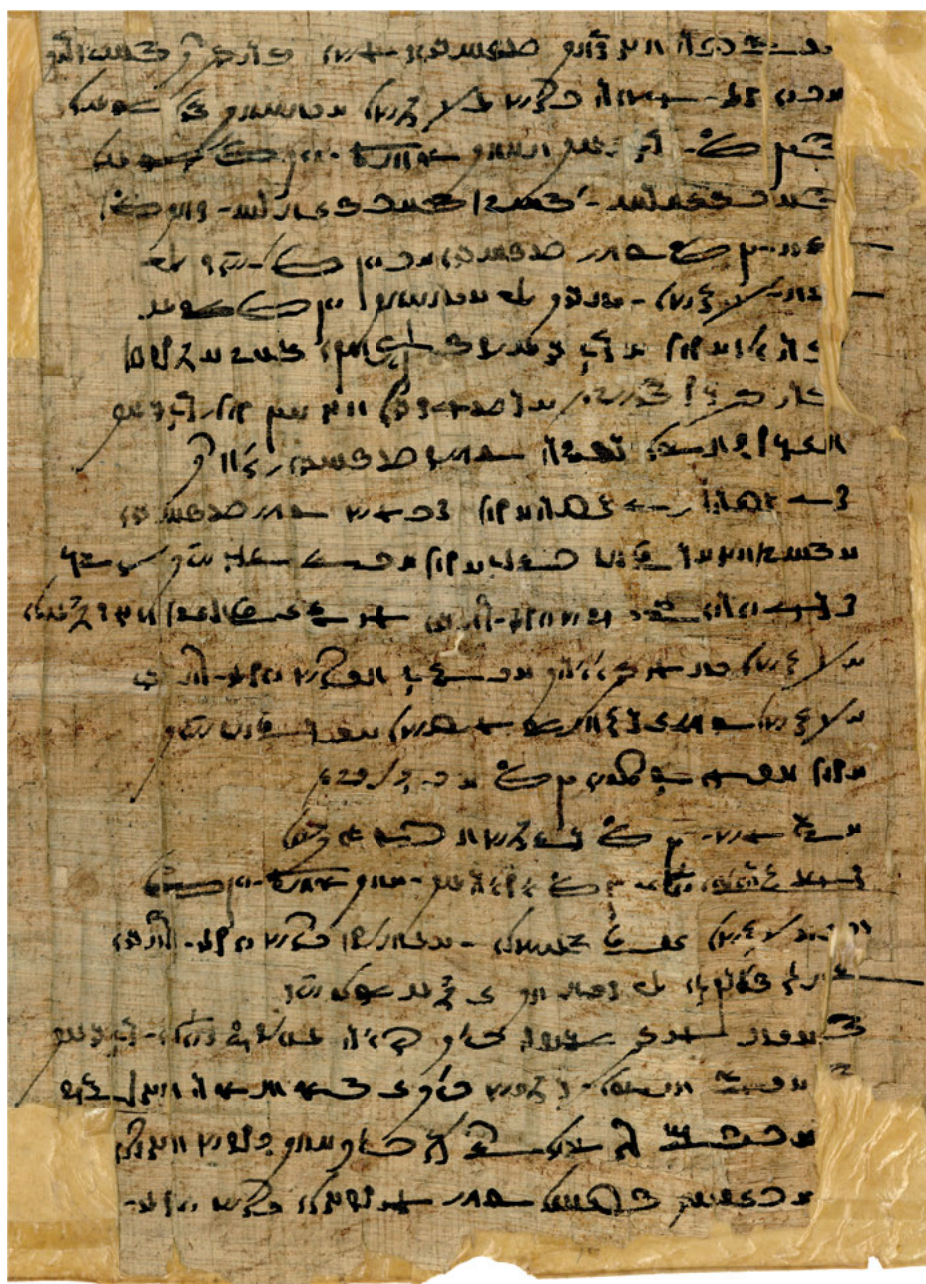


Fig. 9: Papyrus Insinger, a manuscript of the 'Great Demotic Book of Wisdom', recto col. 5; 1st century BCE, Akhmim, 18.5 × 24.9 cm (detail). Rijksmuseum van Oudheden, Leiden, F 95/5.1 vel 2.

layout and other material features. However, this does not mean that these two texts function in the same way or were composed in a similar context.⁸⁹ Similarly, if the text type is the same, the influence of the writing material on the layout may be evident, one such example being Latin military lists written on ostraca.⁹⁰ Although standardised in principle, such documents also show a tendency in various cases to adapt the layout to the writing surface. This can be seen in the differences between the standard layout of the military list Ch.L.A. I 7 I (written on papyrus) versus the irregular layout of the list O.BuNjem 8 (written on an ostrakon), where the last lines do not follow the semi-columnar layout. In other cases, the layout remains basically the same, and it is the smaller writing frame of the ostrakon that influences the text instead: the grid scheme in O.Claud. II 308 (ostrakon) corresponds to that of Ch.L.A. I 7 V, but the words written in the small squares are altogether more abbreviated in the former than those in the latter. In still other cases, different layouts in the same type of text are due to different cultural imprints rather than to different materiality. Thus, the palaeographic background of scribes may be reflected in the layout of their letters. A random example of this would be the Latin letter SB XXVIII 17 098, which is characterised by a structured layout, as opposed to the Greek letter O.Krok. II 203, where the layout does not display any particular format.⁹¹

Finally, the actors engaged in writing the texts could consciously play with the layout. A Latin inscription found in Rome advertises the services of a stonemason's workshop.⁹² However, the inscription begins with the letters *DM*: an abbreviation for the phrase *dis manibus* ('to the spirits of the dead'), a common beginning of Roman funerary texts. These letters 'D' and 'M' are usually arranged in grave inscriptions with a certain distance between them in a separate line. In such a layout, they produced a characteristic image of script that could be immediately recognised as such without actually reading a text. The layout of the inscription from Rome corresponds exactly to this layout and thus presents the inscription as an epitaph, and it is only on closer inspection/reading that we see the content specified as an advertisement of sculptors offering their services—for example, for the erection of a tomb.⁹³ This 'visual pun' shows in a unique way how aware stone sculptors were of the importance of text layouts and associated text types.

In summary, we can state the following about the relationship between layout and text type. Instances of writing that belong to the same text type are often linked together through the similarity of their respective layouts, sometimes across cultural

⁸⁹ Lai 2015.

⁹⁰ Bagnall 2011, 117–137; Sarri 2018, 77–79; Caputo/Lougovaya 2021.

⁹¹ For images of the mentioned artefacts, see: Ch.L.A. I, 15–16 (for Ch.L.A. I 7 I and Ch.L.A. I 7 V); O.BuNjem, 126 (for O.BuNjem 8); O.Claud. II, pl. 39 (for O.Claud. II 308); Bülow-Jacobsen 2003, 425, fig. 223 (for SB XXVIII 17 098); Bülow-Jacobsen/Fournet/Redon 2019, 92 (for O.Krok. II 203).

⁹² CIL VI 9556.

⁹³ Kruschwitz 2008.

and epochal boundaries. In this way, the layout acquires a signal character for the recipient with regard to the expected content, type, and character of the respective text, even without any actual reading process taking place. The processes of standardisation responsible for such correspondences are partly the result of the institutionally prescribed setting of norms (for example, in the case of ruling and administrative writings), and partly the result of their own dynamics in the interaction of the various actors involved in the production of what is written. But the material nature of the writing supports—for example, their small format in the case of coin or gem inscriptions—can also be responsible for correspondences between layout and text type. Admittedly, a correspondence between layout and text type does not apply without exception; but individual actors are able to use the (for the most part) not strictly prescriptive character of this correspondence in order to exploit the standardised character of the layouts of certain text types, the expectation horizon set by this, and the opened-up fields of connotation pertaining to layouts typical of text types as a special means of design: design marked by a certain playful quality, and sometimes characterised by the deliberate thwarting of these same correspondences.

Bibliography

Abbreviations and Sigla

- Ch.L.A. I** *Chartae Latinae Antiquiores I*, ed. by Albert Bruckner and Robert Marichal, Olten/Lausanne, 1954.
- CIL VI** *Corpus Inscriptionum Latinarum VI: Inscriptiones Urbis Romae Latinae*, ed. by Wilhelm Henze, Giovanni Battista de Rossi, Eugen Bormann, Christian Huelsen, and Johann Martin Bang, Berlin 1876–2000.
- IG I³,1** *Inscriptiones Graecae*, vol. I, ed. 3: *Inscriptiones Atticae Euclidis anno anteriores*, fasc. 1: *Decreta et tabulae magistratum*, ed. by David Lewis, Berlin 1981.
- IG V,2** *Inscriptiones Graecae*, vol. V: *Inscriptiones Laconiae Messeniae Arcadiae*, fasc. 2: *Inscriptiones Arcadiae*, ed. by Friedrich Hiller von Gaertringen, Berlin 1913.
- O.BuNjem** *Les Ostraca de Bu Njem*, ed. by Robert Marichal (*Libya Antiqua*, Suppl. VII), Tripolis 1992.
- O.Claud. II** *Mons Claudianus. Ostraca graeca et latina II*, ed. by Jean Bingen, Adam Bülow-Jacobsen, Walter E. H. Cockle, Hélène Cuvigny, François Kayser, and Wilfrid Van Rengen, Cairo 1997.
- O.Krok. II** *Ostraca de Krokodilô II: La correspondance privée et les réseaux personnels de Philoklès, Apollôs et Ischyra*, ed. by Adam Bülow-Jacobsen, Jean-Luc Fournet, and Bérangère Redon (*Fouilles de l'Ifao 81*), Cairo 2019.
- SB XXVIII** *Sammelbuch griechischer Urkunden aus Ägypten*, vol. XXVIII, ed. by Andrea Jördens, vol. ed. by Rodney Ast, Wiesbaden 2013.
- SEG 27** *Supplementum Epigraphicum Graecum*, vol. XXVII (1977), ed. by H. W. Pleket and R. S. Stroud, Amsterdam 1980.

Sources

- Changsha Wuyi Guangchang Dong Han jiandu* 長沙五一廣場東漢簡牘 (The Eastern Han Ledgers and Tablets from Wuyi Square in Changsha), vol. 2, ed. by Changsha shi wenwu kaogu yanjiusuo 長沙市文物考古研究所 (Changsha City Institute for Cultural Antiquities and Archaeology) et al., Shanghai 2018.
- Juyan Han jian* 居延漢簡 (The Han Ledgers of Juyan), vol. 4, ed. by Jiandu zhengli xiaozu 簡牘整理小組 (Ledger and Tablet Editorial Team), Taipei 2017.
- Libri Carolini: Opus Caroli regis contra synodum (Libri Carolini)*, ed. by Ann Freeman with the assistance of Paul Meyvaert (Monumenta Germaniae Historica: Concilia, vol. 2, Suppl. 1), Hannover 1998.
- Poetae Latini aevi Carolini*, vol. 1, ed. by Ernst Dümmler (Monumenta Germaniae Historica: Poetae Latini medii aevi 1), Berlin 1881.

Research Literature

- Assmann, Aleida (2015), *Im Dickicht der Zeichen*, Berlin.
- Assmann, Jan (2012), “Schriftbildlichkeit. Etymographie und Ikonographie”, in: Sybille Krämer, Eva Cancik-Kirschbaum, and Rainer Totzke (eds.), *Schriftbildlichkeit. Wahrnehmbarkeit, Materialität und Operativität von Notationen* (Schriftbildlichkeit 1), Berlin, 139–145.
- Ast, Rodney/Attia, Elodie/Jördens, Andrea/Schneider, Christian (2015), “Layouten und Gestalten”, in: Thomas Meier, Michael R. Ott, and Rebecca Sauer (eds.), *Materiale Textkulturen. Konzepte – Materialien – Praktiken* (Materiale Textkulturen 1), Berlin/Munich/Boston, 597–609, <https://doi.org/10.1515/9783110371291.597>.
- Ast, Rodney/Jördens, Andrea/Quack, Joachim Friedrich/Sarri, Antonia (2015), “Papyrus”, in: Thomas Meier, Michael R. Ott, and Rebecca Sauer (eds.), *Materiale Textkulturen. Konzepte – Materialien – Praktiken* (Materiale Textkulturen 1), Berlin/Munich/Boston, 307–321, <https://doi.org/10.1515/9783110371291.307>.
- Attia, Élodie (2015), *The Masorah of Elijah ha-Naqdan. An Edition of Ashkenazic Micrographical Notes* (Materiale Textkulturen 11), Berlin/Boston, <https://doi.org/10.1515/9783110417920>.
- Bagnall, Roger S. (2011), *Everyday Writing in the Graeco-Roman East* (Sather Classical Lectures 69), Berkeley/Los Angeles.
- Bartoli Langelì, Attilio/Giovè Marchioli, Nicoletta (1996), “Le scritte incise della Fontana Maggiore”, in: Carlo Santini (ed.), *Il linguaggio figurativo della fontana maggiore di Perugia*, Perugia, 163–195.
- Becht-Jördens, Gereon (2014), “Schrift im Mittelalter – Zeichen des Heils”, in: Joachim Friedrich Quack and Daniela Christina Luft (eds.), *Erscheinungsformen und Handhabung Heiliger Schriften* (Materiale Textkulturen 5), Berlin/Munich/Boston, 245–310, <https://doi.org/10.1515/9783110371277.245>.
- Becker, Julia/Licht, Tino/Schneidmüller, Bernd (2015), “Pergament”, in: Thomas Meier, Michael R. Ott, and Rebecca Sauer (eds.), *Materiale Textkulturen. Konzepte – Materialien – Praktiken* (Materiale Textkulturen 1), Berlin/Munich/Boston, 337–347, <https://doi.org/10.1515/9783110371291.337>.
- Bedos-Rezak, Brigitte/Hamburger, Jeffrey F. (eds.) (2016), *Sign and Design. Script as Image in Cross-Cultural Perspective (300–1600 CE)* (Dumbarton Oaks Symposia and Colloquia), Washington D. C.
- Bell, Peter/Fehrmann, Anje/Müller, Rebecca/Olariu, Dominic (eds.) (2021), *Maraviglia. Rezeptionsgeschichte(n) von der Antike bis in die Moderne*, Vienna/Cologne/Weimar.

- Berti, Irene/Bolle, Katharina/Opdenhoff, Fanny/Stroth, Fabian (eds.) (2017), *Writing Matters. Presenting and Perceiving Monumental Inscriptions in Antiquity and the Middle Ages* (Materiale Textkulturen 14), Berlin/Boston, <https://doi.org/10.1515/9783110534597>.
- Berti, Irene/Haß, Christian D./Krüger, Kristina/Ott, Michael R. (2015), "Lesen und Entziffern", in: Thomas Meier, Michael R. Ott, and Rebecca Sauer (eds.), *Materiale Textkulturen. Konzepte – Materialien – Praktiken* (Materiale Textkulturen 1), Berlin/Munich/Boston, 639–650, <https://doi.org/10.1515/9783110371291.639>.
- Berti, Irene/Keil, Wilfried E./Miglus, Peter A. (2015), "Meißeln", in: Thomas Meier, Michael R. Ott, and Rebecca Sauer (eds.), *Materiale Textkulturen. Konzepte – Materialien – Praktiken* (Materiale Textkulturen 1), Berlin/Munich/Boston, 503–518, <https://doi.org/10.1515/9783110371291.503>.
- Bolle, Katharina (2020), *Materialität und Präsenz spätantiker Inschriften. Eine Studie zum Wandel der Inschriftenkultur in den italienischen Provinzen* (Materiale Textkulturen 25), Berlin/Boston, <https://doi.org/10.1515/9783110633566>.
- Brendecke, Arndt (2005), "'Durchschossene Exemplare'. Über eine Schnittstelle zwischen Handschrift und Druck", in: *Archiv für Geschichte des Buchwesens* 59, 50–64.
- Bülöw-Jacobsen, Adam (2003), "The Traffic on the Road and the Provisioning of the Stations", in: Hélène Cuvigny (ed.), *La route de Myos Hormos. L'armée romaine dans le désert Oriental d'Égypte. Praesidia du désert de Bérénice I* (Fouilles de l'IFAO 48), Cairo, 399–426.
- Campbell, Lorne (1998), *The Fifteenth Century Netherlandish Schools: National Gallery Catalogues*, London.
- Campe, Rüdiger (1991), "Die Schreibszene. Schreiben", in: Hans Ulrich Gumbrecht and Karl Ludwig Pfeiffer (eds.), *Paradoxien, Dissonanzen, Zusammenbrüche, Situationen offener Epistemologie*, Frankfurt (Main), 759–772.
- Cancik-Kirschbaum, Eva/Mahr, Bernd (2005), "Anordnung und ästhetisches Profil. Die Herausbildung einer universellen Kulturtechnik in der Frühgeschichte der Schrift", in: Birgit Schneider (ed.), *Diagramme und bildtextile Ordnungen* (Bildwelten des Wissens 3,1), Berlin, 97–114.
- Caputo, Clementina/Lougovaya, Julia (eds.) (2021), *Using Ostraca in the Ancient World. New Discoveries and Methodologies* (Materiale Textkulturen 32), Berlin/Boston, <https://doi.org/10.1515/9783110712902>.
- Chiarini, Sara (2018), *The So-Called Nonsense Inscriptions on Ancient Greek Vases between Paideia and Paidia*, Leiden.
- Clanchy, Michael T. (2013), *From Memory to Written Record. England 1066–1307*, Chichester.
- Crivello, Fabrizio/Denoël, Charlotte/Orth, Peter (2011), *Das Godescalc-Evangelistar. Eine Prachthandschrift für Karl den Großen*, Darmstadt.
- Dadaki, Stavroula (2011), "Part of a Mosaic Floor", in: Anastasia Lazaridou (ed.), *Transition to Christianity: Art of Late Antiquity, 3rd – 7th Century AD* (Exhibition Catalogue, Onassis Cultural Center, New York City, 7. Dezember 2011 – 14. Mai 2012), New York, 135, Kat. Nr. 96.
- Debiais, Vincent (2017), *La croisée des signes: L'écriture et les images médiévales (800–1200)*, Paris.
- Decorte, Robrecht (2015), "Publishing Laws: An Investigation of Layout and Epigraphic Conventions in Roman Statutes", in: *Zeitschrift für Papyrologie und Epigraphik* 195, 243–254.
- Degler, Adam (2017), "Aureus of Postumus with the Owner's Graffito (Gounthiou)", in: Maria Caccamo Caltabiano (ed.), *XV International Numismatic Congress. Taormina 2015. Proceedings, vol. II*, Rome/Messina, 723–726.
- Dhanens, Elisabeth (1980), *Hubert und Jan van Eyck*, Königstein.
- Dietrich, Nikolaus (2017), "Framing Archaic Greek Sculpture: Figure, Ornament and Script", in: Michael S. Squire and Verity J. Platt (eds.), *The Frame in Classical Art: A Cultural History*, Cambridge, 270–316.
- Dietrich, Nikolaus (2018), *Das Attribut als Problem. Eine bildwissenschaftliche Untersuchung zur griechischen Kunst*, Berlin/Munich/Boston.

- Dietrich, Nikolaus (2020), "Überlegungen zum Layout griechischer Statueninschriften ausgehend von der Nikandre-Weihung", in: Nikolaus Dietrich, Johannes Fouquet, and Corinna Reinhardt, *Schreiben auf statuarischen Monumenten. Aspekte materialer Textkultur in archaischer und frühklassischer Zeit* (Materiale Textkulturen 29), Berlin/Boston, 147–195, <https://doi.org/10.1515/9783110645422-004>.
- Dietrich, Nikolaus/Fouquet, Johannes (eds.) (2022), *Image, Text, Stone. Intermedial Perspectives on Graeco-Roman Sculpture* (Materiale Textkulturen 36), Berlin/Boston, <https://doi.org/10.1515/9783110775761>.
- Dietrich, Nikolaus/Fouquet, Johannes/Reinhardt, Corinna (2020), *Schreiben auf statuarischen Monumenten. Aspekte materialer Textkultur in archaischer und frühklassischer Zeit* (Materiale Textkulturen 29), Berlin/Boston, <https://doi.org/10.1515/9783110645422>.
- Embach, Michael/Moulin, Claudine/Wolter-von dem Knesebeck, Harald (eds.) (2019), *Die Handschriften der Hofschule Kaiser Karls des Großen. Individuelle Gestalt und europäisches Kulturerbe*, Trier.
- Enderwitz, Susanne/Opdenhoff, Fanny/Schneider, Christian (2015), "Auftragen, Malen und Zeichnen", in: Thomas Meier, Michael R. Ott, and Rebecca Sauer (eds.), *Materiale Textkulturen. Konzepte – Materialien – Praktiken* (Materiale Textkulturen 1), Berlin/Munich/Boston, 471–484, <https://doi.org/10.1515/9783110371291.471>.
- Faraone, Christopher A. (2012), *Vanishing Acts on Ancient Greek Amulets: From Oral Performance to Visual Design*, London.
- Feld, Helmut (1990), *Der Ikonoklasmus des Westens* (Studies in the History of Christian Thought 41), Leiden.
- Feraudi-Gruénais, Francisca (2017), "Das synaktive Potential von Beischriften", in: Irene Berti, Katharina Bolle, Fanny Opdenhoff, and Fabian Stroth (eds.), *Writing Matters. Presenting and Perceiving Monumental Inscriptions in Antiquity and the Middle Ages* (Materiale Textkulturen 14), Berlin/Boston, 43–76, <https://doi.org/10.1515/9783110534597-004>.
- Foucault, Michel (1973), *Ceci n'est pas une pipe. Deux lettres et quatre dessins de René Magritte*, Montpellier.
- Fouquet, Johannes (2020), "Dekorative (Un)fertigkeit. Zum Prozess des Beschreibens auf einer Gruppe von spätarchaisch-frühklassischen Statuenbasen aus Athen", in: Nikolaus Dietrich, Johannes Fouquet, and Corinna Reinhardt, *Schreiben auf statuarischen Monumenten. Aspekte materialer Textkultur in archaischer und frühklassischer Zeit* (Materiale Textkulturen 29), Berlin/Boston, 103–146, <https://doi.org/10.1515/9783110645422-003>.
- Frese, Tobias (2006), *Die Bildkritik des Bernhard von Clairvaux. Die Apologia im monastischen Diskurs*, Bamberg.
- Frese, Tobias (2014), "'Denn der Buchstabe tötet' – Reflexionen zur Schriftpräsenz aus mediävischer Perspektive", in: Tobias Frese, Wilfried E. Keil, and Kristina Krüger (eds.), *Verborgen, unsichtbar, unlesbar – zur Problematik restringierter Schriftpräsenz* (Materiale Textkulturen 2), Berlin/Boston 2014, 1–16, <https://doi.org/10.1515/9783110353587.1>.
- Frese, Tobias/Horstmann, Lisa/Wenig, Franziska (eds.) (2024), *Sakrale Schriftbilder. Zur ikonischen Präsenz des Geschriebenen im mittelalterlichen Kirchenraum* (Materiale Textkulturen 42), Berlin/Boston, <https://doi.org/10.1515/9783111304496>.
- Frese, Tobias/Keil, Wilfried E./Krüger, Kristina (eds.) (2014), *Verborgen, unsichtbar, unlesbar – zur Problematik restringierter Schriftpräsenz* (Materiale Textkulturen 2), Berlin/Boston, <https://doi.org/10.1515/9783110353587>.
- Fricke, Harald (1981), *Norm und Abweichung: Eine Philosophie der Literatur*, Munich.
- Fruhstorfer, Martin (1987), "Fiktionssprünge in Van Eycks Bildnis des sogenannten Timotheos", in: *Oud Holland* 101 (4), 277–279.

- Gansel, Christina/Jürgens, Frank (2009), *Textlinguistik und Textgrammatik. Eine Einführung*, 3rd ed., Göttingen.
- Gerleigner, Georg S. (2016), "Tracing Letters on the Eurymedon Vase. On the Importance of Placement of Vase-Inscriptions", in: Dimitrios Yatromanolakis (ed.), *Epigraphy of Art. Ancient Greek Vase-Inscriptions and Vase-Paintings*, Oxford, 165–184.
- Gertz, Jan Christian/Schultz, Sandra/Šimek, Jakub/Wallenwein, Kirsten (2015), "Abschreiben und Kopieren", in: Thomas Meier, Michael R. Ott, and Rebecca Sauer (eds.), *Materiale Textkulturen. Konzepte – Materialien – Praktiken* (Materiale Textkulturen 1), Berlin/Munich/Boston, 585–595, <https://doi.org/10.1515/9783110371291.585>.
- Gibhardt, Boris R./Grave, Johannes (eds.) (2018), *Schrift im Bild. Rezeptionsästhetische Perspektiven auf Text-Bild-Relationen in den Künsten* (Ästhetische Eigenzeiten 10), Hannover.
- Gludovatz, Kathrin (2005), "Der Name am Rahmen, der Maler im Bild. Künstlerselbstverständnis und Produktionskommentar in den Signaturen Jan van Eycks", in: *Wiener Jahrbuch für Kunstgeschichte* 54, 115–175.
- Grube, Gernot/Kogge, Werner (2005), "Zur Einleitung: Was ist Schrift?", in: Gernot Grube, Werner Kogge, and Sybille Krämer (eds.), *Schrift. Kulturtechnik zwischen Auge, Hand und Maschine*, Munich, 9–19.
- Haendler, Gert (1958), *Epochen karolingischer Theologie. Eine Untersuchung über die karolingischen Gutachten zum byzantinischen Bilderstreit*, Berlin.
- Halperin, Dalia-Ruth (2021), "Micrography Mounted Falconers: An Exegetic Text and Image", in: Hanna Liss (ed.), *Figurative Masorah in Western European Manuscripts*, Frankfurt (Main) et al., 59–101.
- Hamburger, Jeffrey F. (2011), *The Iconicity of Script. Writing as Image in the Middle Ages* (Word & Image 27.3), Abingdon et al.
- Hamburger, Jeffrey F. (2014), *Script as Image* (Corpus of Illuminated Manuscripts 21), Paris et al.
- Hamel, Christopher de (1984), *Glossed Books of the Bible and the Origins of the Paris Booktrade*, Woodbridge.
- Harbison, Craig (2012), *Jan van Eyck: The Play of Realism*, 2nd ed., London.
- Horstmann, Lisa (2022), *Ikongraphie in Bewegung. Die Überlieferungsgeschichte der Bilder des Welschen Gastes*, Heidelberg 2022, <https://doi.org/10.11588/heibooks.1004>.
- Job, Jon (2013), [Art.] "Karolingische Schriftenhierarchie", in: *Wörterbücher zur Sprach- und Kommunikationswissenschaft (WSK) Online*, https://www.degruyter.com/database/WSK/entry/wsk_id_wsk_artikel_artikel_21970/html (accessed 10/9/2021).
- Keesling, Catherine (2017), *Early Greek Portraiture. Monuments and Histories*, Cambridge.
- Keil, Wilfried E./Kianrad, Sarah/Theis, Christoffer/Willer, Laura (eds.) (2018), *Zeichentragende Artefakte im sakralen Raum. Zwischen Präsenz und Unsichtbarkeit* (Materiale Textkulturen 20), Berlin/Boston, <https://doi.org/10.1515/9783110619928>.
- Kemmers, Fleur/Scholz, Markus (2017), "Ein spezifischer Wert: Ein republikanischer Denar mit Graffiti aus Groß-Rohrheim (Lkr. Bergstraße)", in: Udo Reker (ed.), *Iucundi acti labores. Festschrift für Egon Schallmayer anlässlich des 65. Geburtstags* (Jahrbuch für Archäologie und Paläontologie in Hessen, Sonderbd. 5), Wiesbaden, 124–128.
- Kirchner, Johannes (1935), *Imagines inscriptionum Atticarum. Ein Bilderatlas epigraphischer Denkmäler Attikas*, Berlin.
- Kianrad Sarah/Theis, Christoffer/Willer, Laura (eds.) (2018), *Bild und Schrift auf 'magischen' Artefakten* (Materiale Textkulturen 19), Berlin/Boston, <https://doi.org/10.1515/9783110604337>.
- Kneißl, Peter (1969), *Die Siegestitulatur der römischen Kaiser. Untersuchungen zu den Siegerbeinamen des ersten und zweiten Jahrhunderts* (Hypomnemata 25), Göttingen.

- Krämer, Sybille (2005), "'Operationsraum Schrift'. Über einen Perspektivwechsel in der Betrachtung von Schrift", in: Gernot Grube, Werner Kogge, and Sybille Krämer (eds.), *Schrift. Kulturtechnik zwischen Auge, Hand und Maschine*, Munich, 23–57.
- Krämer, Sybille (2006), "Zur Sichtbarkeit der Schrift oder: Die Visualisierung des Unsichtbaren in der operativen Schrift. Zehn Thesen", in: Susanne Strätling and Georg Witte (eds.), *Die Sichtbarkeit der Schrift*, Munich, 75–84.
- Krämer, Sybille/Cancik-Kirschbaum, Eva/Totzke, Rainer (2012), *Schriftbildlichkeit. Wahrnehmbarkeit, Materialität und Operativität von Notationen* (Schriftbildlichkeit 1), Berlin.
- Krämer, Sybille/Totzke, Rainer (2012), "Einleitung: Was bedeutet Schriftbildlichkeit?", in: Sybille Krämer, Eva Cancik-Kirschbaum, and Rainer Totzke (eds.), *Schriftbildlichkeit. Wahrnehmbarkeit, Materialität und Operativität von Notationen* (Schriftbildlichkeit 1), Berlin, 13–35.
- Kries, Friedrich Wilhelm von (1985), *Thomasin von Zerclaere. Der Welsche Gast*, vol. 4: *Die Illustrationen des Welschen Gasts: Kommentar mit Analyse der Bildinhalte und den Varianten der Schriftbandtexte. Verzeichnisse, Namenregister, Bibliographie* (Göppinger Arbeiten zur Germanistik 425/IV), Göppingen, <https://doi.org/10.11588/diglit.52818>.
- Kruschwitz, Peter (2008), "Patterns of Text Layout in Pompeian Verse Inscriptions", in: *Studia Philologica Valentina* 11 (8), 225–264.
- Kubina, Krystina (2018), "Manuel Philes – A Begging Poet?", in: Andreas Rhoby and Nikos Zagklas (eds.), *Middle and Late Byzantine Poetry: Texts and Contexts*, Turnhout, 147–181.
- Kypta, Ulla (2015), "Selbstreproduzierende Abrechnungen. Was das Layout der englischen Pipe Rolls des 12. Jahrhunderts über ihren Zweck verrät", in: Gudrun Gleba and Niels Petersen (eds.), *Wirtschafts- und Rechnungsbücher des Mittelalters und der frühen Neuzeit. Formen und Methoden der Rechnungslegung: Städte, Klöster, Kaufleute*, Göttingen, 273–293.
- L'Engle, Susan/Gibbs, Robert (2001), *Illuminating the Law. Legal Manuscripts in Cambridge Collections* (Ausstellungskatalog), London/Turnout.
- Lai, Guolong (2015), *Excavating the Afterlife: The Archaeology of Early Chinese Religion*, Seattle.
- Landwehr, Achim (2014), *Geburt der Gegenwart. Eine Geschichte der Zeit im 17. Jahrhundert*, Frankfurt (Main).
- Leatherbury, Sean V. (2020), *Inscribing Faith in Late Antiquity. Between Reading and Seeing*, New York.
- Lewis, Susanne (1980), "Sacred Calligraphy: The Chi Rho Page in the Book of Kells", *Traditio* 36, 139–158.
- Licht, Tino (2013), "Beobachtungen zum Lorscher Skriptorium in karolingischer Zeit", in: Julia Becker, Tino Licht, and Stefan Weinfurter (eds.), *Karolingische Klöster. Wissenstransfer und kulturelle Innovation* (Materiale Textkulturen 4), Berlin/Munich/Boston 2014, 145–162, <https://doi.org/10.1515/9783110371222.145>.
- Lichtheim, Miriam (1983), *Late Egyptian Wisdom Literature in the International Context*, Freiburg (Breisgau)/Göttingen.
- Liss, Hanna (2018), "Aschkenasische Bibelcodices als Träger exegetischer und theologischer Geheimnisse", in: Ursula Schattner-Rieser and Josef M. Oesch (eds.), *700 Jahre jüdische Präsenz in Tirol. Geschichte der Fragmente, Fragmente der Geschichte*, Innsbruck, 203–223.
- Liss, Hanna (2021), "Negation oder Transformation? Illustrative Auflösung masoretischer Listen in einem mittelalterlichen hebräischen Manuskript", in: Şirin Dadaş and Christian Vogel (eds.), *(Nicht)Wissen – Dynamiken der Negation in vormodernen Kulturen*, Wiesbaden, 313–330.
- Lohmann, Polly (2017), *Graffiti als Interaktionsform. Geritzte Inschriften in den Wohnhäusern Pompejis* (Materiale Textkulturen 16), Berlin/Boston, <https://doi.org/10.1515/9783110574289>.
- Lorenz, Katharina (2010), "'Dialectics at a Standstill': Archaic Kouroi-cum-Epigram as I-Box", in: Manuel Baumbach, Andrej Petrovic, and Ivana Petrovic (eds.), *Archaic and Classical Greek Epigram*, Cambridge, 131–148.

- Meier, Christel (1997), "Illustration und Textcorpus. Zu kommunikations- und ordnungsfunktionalen Aspekten der Bilder in den mittelalterlichen Enzyklopädiehandschriften", in: *Frühmittelalterliche Studien* 31, 1–31.
- Mersmann, Birgit (2015), *Schriftikonik. Bildphänomen der Schrift in kultur- und medienkomparativer Perspektive*, Paderborn.
- Mitalaité, Kristina (2007), *Philosophie et théologie de l'image dans les Libri Carolini* (Collection des études augustinienes: Série Moyen Âge et temps modernes 43), Paris.
- Montandon, Alain (ed.) (1990), *Iconotextes. Colloque international à l'Université Blaise Pascal du 17 au 19 mars 1988*, Paris.
- Müller, Rebecca (2002), *Sic hostes lanua frangit. Spolien und Trophäen im mittelalterlichen Genua*, Marburg 2002.
- Newby, Zahra/Leader-Newby, Ruth (eds.) (2007), *Art and Inscriptions in the Ancient World*, Cambridge.
- Opdenhoff, Fanny (2021), *Die Stadt als beschriebener Raum. Die Beispiele Pompeji und Herculaneum* (Materiale Textkulturen 33), Berlin/Boston, <https://doi.org/10.1515/9783110722758>.
- Ott, Michael R./Kiyannrad, Sarah (2015), "Geschriebenes", in: Thomas Meier, Michael R. Ott, and Rebecca Sauer (eds.), *Materiale Textkulturen. Konzepte – Materialien – Praktiken* (Materiale Textkulturen 1), Berlin/Munich/Boston, 157–168, <https://doi.org/10.1515/9783110371291.157>.
- Ott, Norbert H. (2002), "Mise en page. Zur ikonischen Struktur der Illustrationen von Thomasins 'Welschem Gast'", in: Horst Wenzel and Christina Lechtermann (eds.), *Beweglichkeit der Bilder. Text und Imagination in den illustrierten Handschriften des 'Welschen Gastes' von Thomasin von Zerclaere* (Pictura et poesis 15), Cologne, 33–64.
- Panofsky, Erwin (1949), "Who is Jan Van Eyck's 'Tymotheos'?", in: *Journal of the Warburg and Courtauld Institutes* 12, 80–82.
- Pappas, Alexandra (2012), "The Treachery of Verbal Images: Viewing the Greek Technopaegnia", in: Jan Kwapisz, David Petrain, and Mikolaj Szymanski (eds.), *The Muse at Play: Riddles and Wordplay in Greek and Latin Poetry*, Berlin/Boston, 199–224.
- Paviot, Jacques (1995), "The Sitter for Jan van Eyck's 'Leal Sovvenir'", in: *Journal of the Warburg and Courtauld Institutes* 58, 210–215.
- Pelekianides, Stylianos M. (1975), "Ανασκαφή Φιλίππων", in: *Πρακτικά της εν Αθήναις Αρχαιολογικής Εταιρείας* 130, 91–102.
- Petrucchi, Armando (1986), *La scrittura: Ideologia e rappresentazione*, Turin.
- Pfisterer, Ulrich (ed.) (2011), *Metzler Lexikon Kunstwissenschaft*, 2nd ed., Stuttgart.
- Pilhofer, Peter (2009), *Philippi*, vol. II: *Katalog der Inschriften von Philippi* (Wissenschaftliche Untersuchungen zum Neuen Testament 119), 2nd ed., Tübingen.
- Quack, Joachim Friedrich (2019), "Neue Fragmente des großen demotischen Weisheitsbuches mit einer Kollation der bereits publizierten Fragmente", in: Joachim Friedrich Quack and Kim Ryholt (eds.), *Demotic Literary Texts From Tebtunis and Beyond* (The Carlsberg Papyri 11), Copenhagen, 421–469.
- Rehm, Ulrich/Simonis, Linda (2019), "Formen und Wirkungsweisen der Inschrift in epochen- und fächerübergreifender Perspektive. Umriss eines Forschungsprogramms", in: Ulrich Rehm and Linda Simonis (eds.), *Poetik der Inschrift*, Heidelberg, 7–23.
- Reudenbach, Bruno (1998), *Das Godescalc-Evangelistar: Ein Buch für die Reformpolitik Karls des Großen*, Frankfurt (Main).
- Reudenbach, Bruno (2021), "Enigmatic Calligraphy: Lettering as Visualized Hermeneutic of Sacred Scripture", in: Jörg B. Quenzer (ed.), *Exploring Written Artefacts. Objects, Methods, and Concepts*, vol. 2 (Studies in Manuscript Cultures, vol. 25), Berlin/Boston, 773–794.

- Riccioni, Stefano (2008), “Épiconographie de l’art roman en France et en Italie (Bourgogne/Latium). L’art médiéval en tant que discours visuel et la naissance d’un nouveau langage”, in: *Bulletin du Centre d’études médiévales d’Auxerre* 12, 1–12.
- Rieß, Peter/Fisch, Stefan/Strohschneider, Peter (1995), *Prolegomena zu einer Theorie der Fußnote*, Münster.
- Roels, Evelien (2018), “The Queen of Inscriptions Contextualized. The Presence of Civic Inscriptions in the Pronaos of Ancient Temples in Hellenistic and Roman Asia Minor (4th cent. BCE – 2nd cent. CE)”, in: Emilie van Opstall (ed.), *Sacred Thresholds. The Door to the Sanctuary in Late Antiquity*, Leiden, 221–253.
- Roland, Martin (1991), *Illustrierte Weltchroniken bis in die zweite Hälfte des 4. Jahrhunderts*, Vienna.
- Ronig, Franz (1984), “Die Buchmalerei-Schule des Trierer Erzbischofs Kuno von Falkenstein. Ein Forschungsbericht”, in: Michael Berens, Claudia Maas, and Franz Ronig (eds.), *Florilegium artis. Beiträge zur Kunstwissenschaft und Denkmalpflege, Festschrift für Wolfgang Götz*, Saarbrücken, 111–115.
- Roth, Michael (ed.) (2010), *Schrift als Bild* (Ausstellungskatalog Kupferstichkabinett Staatliche Museen zu Berlin 29.10.2010 – 23.1.2011), Petersberg.
- Sarri, Antonia (2018), *Material Aspects of Letter Writing in the Graeco-Roman World*, (Materiale Textkulturen 12), Berlin/Boston, <https://doi.org/10.1515/9783110426953>.
- Saurma-Jeltsch, Lieselotte (1994), “Karolingische Bildtheologie. Zur karolingischen Haltung gegenüber dem Bilderstreit”, in: Johannes Fried, Rainer Koch, Lieselotte E. Saurma-Jeltsch, and Andreas Thiel (eds.), *794 – Karl der Große in Frankfurt am Main. Ein König bei der Arbeit* (Ausstellungskatalog zum 1200-Jahre Jubiläum der Stadt Frankfurt am Main im Historischen Museum Frankfurt am Main, 18.5. – 28.8.1994), Sigmaringen, 69–72.
- Saurma-Jeltsch, Lieselotte (1997), “Das Bild in der Worttheologie Karl des Großen. Zur Christologie in karolingischen Miniaturen”, in: Rainer Berndt SJ (ed.), *Das Frankfurter Konzil 794. Kristallisationspunkt karolingischer Kultur*, vol. 2: *Kultur und Theologie* (Quellen und Abhandlungen zur mittelhochrheinischen Kirchengeschichte 80/2), Mainz, 635–675 and 1069–1079.
- Saurma-Jeltsch, Lieselotte (2014), “Der Einzelne im Verbund. Kooperationsmodelle in der spätmittelalterlichen Buchherstellung”, in: Armand Tif (ed.), *Wege zum illuminierten Buch. Herstellungsbedingungen für Buchmalerei in Mittelalter und früher Neuzeit*, Böhlau, 177–201.
- Schneider, Christian/Schmidt, Peter/Šimek, Jakub/Horstmann, Lisa (eds.) (2022), *Der ‘Welsche Gast’ des Thomasin von Zerklare. Neue Perspektiven auf eine alte Verhaltenslehre in Text und Bild* (Kulturelles Erbe: Materialität – Text – Edition 2), Heidelberg, <https://doi.org/10.17885/heup.545>.
- Schneider, Karin (2014), *Paläographie und Handschriftenkunde für Germanisten. Eine Einführung*, 3rd ed., Berlin/Boston.
- Scholz, Sebastian (2015), “Bemerkungen zur Bildungsentwicklung im Frühen Mittelalter. Zusammenfassung”, in: Julia Becker, Tino Licht, and Stefan Weinfurter (eds.), *Karolingische Köster. Wissenstransfer und kulturelle Innovation* (Materiale Textkulturen 4), Berlin/Munich/Boston 2014, 275–289, <https://doi.org/10.1515/9783110371222.275>.
- Sitz, Anna M. (2019), “Beyond Spolia: A New Approach to Old Inscriptions in Late Antique Anatolia”, in: *American Journal of Archaeology* 123 (4), 643–674.
- Squire, Michael J. (2009), *Image and Text in Graeco-Roman Antiquity*, Cambridge.
- Squire, Michael/Wienand, Johannes (eds.) (2017), *‘Morphogrammata’ / The Lettered Art of Optatian. Figuring Cultural Transformations in the Age of Constantine* (Morphomata 33), Paderborn.
- Starkey, Kathryn (2022), “Die Entstehung eines Nachschlagewerks?”, in: Christian Schneider, Peter Schmidt, Jakub Šimek, and Lisa Horstmann (eds.), *Der ‘Welsche Gast’ des Thomasin von Zerklare. Neue Perspektiven auf eine alte Verhaltenslehre in Text und Bild* (Kulturelles Erbe: Materialität – Text – Edition 2), Heidelberg, 151–177, <https://doi.org/10.17885/heup.545.c13908>.

- Steinseifer, Martin (2013), "Texte sehen – Diagrammatologische Impulse für die Textlinguistik", in: *Zeitschrift für germanistische Linguistik* 41 (1), 8–39.
- Stingelin, Martin (ed.) (2004), "*Mir ekelt vor diesem tintenklecksenden Säkulum.*" *Schreibszenen im Zeitalter der Manuskripte* (Zur Genealogie des Schreibens 1), Munich.
- Strätling, Susanne/Witte, Georg (2006), "Die Sichtbarkeit der Schrift zwischen Evidenz, Phänomenalität und Ikonizität. Zur Einführung in diesen Band", in: Susanne Strätling and Georg Witte (eds.), *Sichtbarkeit der Schrift*, Munich, 7–20.
- Tersch, Harald (2008), *Schreibkalender und Schreibkultur. Zur Rezeptionsgeschichte eines frühen Massenmediums*, Vienna.
- Tsien, Tuen-Hsuin (1962), *Written on Bamboo and Silk. The Beginnings of Chinese Books and Inscriptions*, Chicago.
- Wagner, Peter (1995), *Reading Iconotexts: From Swift to the French Revolution*, London.
- Wagner, Peter (1996), "Introduction: Ekphrasis, Iconotexts, and Intermediality – the State(s) of the Art(s)", in: Peter Wagner (ed.), *Icons – Texts – Iconotext. Essays on Ekphrasis and Intermediality* (European Cultures 6), Berlin/New York, 1–40.
- Watts, James (ed.) (2013), *Iconic Books and Texts*, Sheffield.
- Waywell, Geoffrey, B. (1993), "The Ada, Zeus and Idrieus Relief from Tegea in the British Museum", in: Olga Palagia and William D. Coulson (eds.), *Sculpture from Arcadia and Laconia. Proceedings of an International Conference Held at the American School of Classical Studies at Athens, April 10–14, 1992* (Oxbow Monograph 30), Oxford, 79–86.
- Wehde, Susanne (2000), *Typographische Kultur. Eine zeichentheoretische und kulturgeschichtliche Studie zur Typographie und ihrer Entwicklung* (Studien und Texte zur Sozialgeschichte der Literatur 69), Tübingen.
- Werz, Ulrich (2004), *Gegenstempel auf Reichs- und Provinzialprägungen der römischen Kaiserzeit. Katalog der Sammlung Dr. Konrad Bech, Mainz* (Schriftenreihe der Numismatischen Gesellschaft Speyer 45), Speyer.
- Wimmer, Hanna (2018), *Illustrierte Aristotelescodices. Die medialen Konsequenzen universitärer Lehr- und Lernpraxis in Oxford und Paris* (Sensus. Studien zur mittelalterlichen Kunst 7), Vienna/Cologne/Weimar.
- Winterer, Christoph (2013), "'Das Wort Gottes in ruhmvollem Glanz blinkend'. Kunst im Umkreis Karls des Großen", in: Michael Imhof and Christoph Winterer: *Karl der Große. Leben und Wirkung, Kunst und Architektur*, 2nd ed., Petersberg, 76–117.
- Wolf, Jana (2018), *Das Überführen des Welschen Gastes in ein französisches Layout-System. Die New Yorker Handschrift E*, <https://archiv.ub.uni-heidelberg.de/artdok/5861/> (accessed 19/7/2022).
- Wood, Wendy (1978), "A New Identification of the Sitter in Jan van Eyck's 'Timotheus' Portrait", in: *The Art Bulletin* 60 (4), 650–654.
- Woytek, Bernhard (2010), *Die Reichsprägung des Kaisers Traianus (98–117)*, vol. 1 (Moneta Imperii Romani 14), Vienna.