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TRANSFORMING THE MEDIEVAL WORLD

USES OF PRAGMATIC LITERACY IN THE MIDDLE AGES

A CD-ROM AND BOOK

Edited by

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Foreword

It was during the final phase of Special Research Project (SFB) 231, 'Träger, Felder, Formen pragmatischer Schriftlichkeit im Mittelalter' that the idea evolved of utilizing a new presentational method for disseminating the results of our research activities. Our aim was to create a product for the academic world, which would function as a new, multimedia-based point of access to the activities carried out in SFB 231, while also serving as a thorough introduction to the field of literacy and literature in the Middle Ages for the interested general public. The editors benefited from the support of a number of people in the production of this CD-ROM, and we are pleased to be able to take this opportunity to express our thanks for their assistance.

We would first of all like to thank Prof. Dr Peter Johanek, whose original idea it was to create a multimedia presentation on the basis of a CD-ROM, for disseminating the results of the research conducted by SFB 231. He provided us with much support and encouragement, particularly in the early phases of the project. Prof. Dr Volker Honemann was among the first advocates of our CD-ROM. He provided invaluable assistance throughout the project, played an essential role in ensuring its funding, and — as did other project heads within SFB 231 — nurtured the activities of the participating staff by supplying strong support wherever needed.

Prof. Dr Christel Meier-Staubach assumed overall responsibility for the CD-ROM project as chief spokesperson of the Special Research Project. We would also like to thank her for her faith in the work of the editors and her constant support and enthusiasm for our work.

It is due to the generous financial support of the 'Deutsche Forschungsgemeinschaft' (DFG) that the creation of this CD-ROM has been at all possi-

ble. Without their help, this project would certainly have remained on the shelf.

Dr Marco Mostert of the University of Utrecht also deserves our thanks, not only for agreeing to incorporate our CD-ROM in the series, 'Utrecht Studies in Medieval Literacy', but also for the varied support he gave to the CD ROM project for a number of years. The University of Münster, as the host institution of the SFB 231, also supported the CD-ROM, by making special funds available with a minimum of bureaucracy.

Brepols Publishers, in particular Dr Simon Forde, expressed an interest in publishing an English version of our CD-ROM for an international audience at an early stage of the project, and he provided essential support in realising this aim. He offered his expertise and — what is more — patience in answering an endless stream of questions concerning the English translation, and deserves great thanks for proof-reading most of the text on the CD-ROM. We would like to thank our translator Richard Brightbart in Münster, who performed the challenging task of translating the sometimes highly specialized texts. He always found the time to discuss difficult phrases at length with the authors. We are also extremely grateful to the particular ministry in the government of Nord-Rhein-Westfalen for providing funds for this version.

Special thanks are also due to the SNT Media Concept company in Münster (specifically, Manfred Hendricks, Frank Heuwes, Vera Lohmann, Rainer Schwake, and Michael Zumdiek). They have been responsible for the design and technical implementation of the project. They had to cope with complicated task descriptions, Latin quotations, and sometimes poor scans of some of the illustrations. In no way discouraged as a result, they took all of our special wishes on board and even came up with new ideas regarding the creative design and presentation of the material, the nature of which they first had to become accustomed to.

Numerous libraries and archives in Germany and abroad made their materials available to us and it is thanks to them that we were able to fully implement our idea of presenting medieval literature in all its forms and appearances to the user.

We would, at this point, also like to mention the authors — they were all faced with a new challenge regarding both the presentation and the form of the articles. Rather than writing an article and annotating it with explanatory illustrations, a standard procedure in the academic world, they now had to deal with such things as pixel sizes, animations and fonts. But they rose to the challenge and forged new paths in the presentation of academic know-

ledge, displaying great enthusiasm in the process. Dr Theo Klausmann was not only responsible for two of the articles, but was also involved in the essential task of compiling the bibliography. Dr Margreth Egidi and Dr Ulrich Fischer were on permanent call in the final phase, and provided us with valuable support.

Together with the 'Deutsche Forschungsgemeinschaft', who have accompanied us on our new path in the presentation of knowledge, we eagerly await the interest and reactions of our target audience to our CD-ROM. We hope that the multimedia presentations, which form the central component, will enable us to reach out to a new audience and instil in them an interest in medieval research. The introduction which follows explains the concept of the CD-ROM, with a view to it being used in universities and senior secondary-school classes. We hope that our multimedia presentations will succeed in giving academics, students and all interested individuals a new insight into an extraordinary phenomenon which was to have a lasting impact on medieval history.

The Editors Münster, January 2006

Part Two Introductory Essays

Introduction: Written Texts on the Move: Medieval Manuscript Culture in a Multimedia Environment

FRANZ-JOSEF ARLINGHAUS, MARCUS OSTERMANN, OLIVER PLESSOW, and GUDRUN TSCHERPEL

ABSTRACT

he CD-ROM 'Transforming the Medieval World: Uses of Pragmatic Literacy in the Middle Ages' was conceived as a platform on which to display the work of the Special Research Project, SFB 231 in Münster, by utilizing the benefits of multimedia techniques in presenting samples of research. The concept was developed with the opportunities afforded by this medium in mind, in particular its innate and unique potential for presenting the results of academic research. By linking together passages of text, images, spoken commentaries, and animated sequences of images, it has become possible to present complex research results in a far more concentrated and succinct manner than was formerly possible.

Ever since the eleventh century, a multitude of types of text have continued to occupy a significant and central position in everyday communication. The causes and effects of this first media revolution in Europe are presented on this CD-ROM and exemplified by several medieval types of text. The aim is to display and interpret the fluid and open nature of the texts produced in the medieval manuscript culture ('mouvance'), as postulated by researchers, by making use of the opportunities afforded to us by the new medium.

This work is aimed at academics working in the field, as well as students and those with a non-scholarly interest in the material. The title

'Transforming the Medieval World' has been used to intimate the connection between today's discussion over the media revolution and what happened between the eleventh and fifteenth centuries, which forms the basis of the research we present here. A total of eleven presentations, comprising such diverse areas as theology, medieval Latin and German literature, history, and art history, give users the opportunity to select between such themes as book illustration, world chronicles and even the first printed invitations to a 'Schützenfest' (a shooting competition during a fair). In addition to the multimedia articles, the CD-ROM also contains an anthology of important essays from the SFB, which have been selected to complement the multimedia contributions and provide the user with further reading materials. Furthermore, the CD-ROM contains a general bibliography of all the articles and essays written within the framework of the SFB. All of these texts can be located using the search function and, if desired, printed out.

Concept 1:

'Mouvance', or Fluidity, in the Medieval Manuscript Culture and the New Media

Since the 1970s, mention has been made on several occasions in the Germanspeaking world of the level of variance displayed in medieval texts that are preserved today. In contrast to the author-centred approach, the so-called 'Überlieferungsgeschichte' (reception theory) has already seriously examined the variations of a text as they were actually read and copied in the Middle Ages. More recent theoretical discussions, which are subsumed under the term New Philology, go one step further and declare the openness and variability displayed by written medieval texts as the central characteristic of the manuscript culture at that time.² This approach insists that the

concept of an 'authorized original', which was to be preserved as far as possible in its unchanged state, was largely foreign to medieval written culture. Texts are no longer regarded as being the expression of the author's specific intention, only to be subjected to the inaccuracies brought about by poor copying, which need to be filtered out in the process of editing.³ Instead, the present attitude is that each textual variant can and should be taken seriously in the form in which it presents itself to us, as 'manifestations of historically specific communications', that is, communications embedded in specific situations. ⁴ The question is not so much what the intention of the author was in writing the text, but the context of the communication, and it is in this perspective that changes to and within a text take on a new significance.

This new perspective on medieval texts is of particular interest to historical research, which examines the causes and effects of the observed increase in the use of writing in all areas of life since the eleventh and twelfth centuries. The point is not to retrace those quantitative changes which are already evident from the texts as they reveal themselves to us today — and the reader is warned against attributing a simple instrumental function to medieval writing or regarding it as the catalyst of a social process (of rationalization). Rather, it is important to consider a differentiated, qualitative analysis of phenomena which result from the dynamic of chang-

cf. Ursula SCHAEFER, 'Von Schreibern, Philologen und anderen Schurken. Bemerkungen zur New Philology und New Medievalism in den USA', Das Mittelalter 5.1 (2000), 69-81 (at pp. 72ff.). Regarding the criticism expressed especially by Stackmann, see Karl STACKMANN, 'Neue Philologie?', in Modernes Mittelalter. Neue Bilder einer populären Epoche, ed. by Joachim HEINZLE (Frankfurt/M. and Leipzig, 1994), pp. 398-427. Concerning the role of the author, see Peter STROHSCHNEIDER, 'Situationen des Textes, Okkasionelle Bemerkungen zur 'New Philology'', Zeitschrift für deutsche Philologie 116 (1997), 62-86.

¹ For a basic outline of these ideas, see Klaus GRUBMÜLLER, Konrad KUNZE, Klaus MATZEL, Peter JOHANEK, Kurt RUH and Georg STEER, 'Spätmittelalterliche Prosaforschung. DFG-Forschergruppe - Programm am Seminar für deutsche Philologie der Universität Würzburg' Jahrbuch für Internationale Germanistik 5 (1973), 156-176. See also the articles in the following anthology: Kurt Ruh (ed.), Überlieferungsgeschichtliche Prosaforschung. Beiträge der Würzburger Forschergruppe zur Methode und Auswertung, Texte und Textgeschichte, 19 (Tübingen, 1985).

² Furthermore, the essays contained in the special issue of Speculum in 1990 are of fundamental importance; cf. the introduction by Stephen G. NICHOLS, 'Introduction: Philology in a Manuscript Culture', Speculum 65 (1990), 1-10. For a contextual essay on the approach,

³ 'Rather than a literary history of authors and works, what should be postulated is a history of production conditions and evolutionary stages, function types and social locations of the uses of literacy', to paraphrase Nikolaus STAUBACH, 'Text als Prozeß. Zur Pragmatik des Schreibens und Lesens in der Devotio moderna', in Pragmatische Dimensionen mittelalterlicher Schriftkultur, Akten des Internationalen Kolloquiums des Sonderforschungsbereichs 231, 26.-29. Mai 1999, ed. by Christel MEIER, Volker HONEMANN, Hagen KELLER and Rudolf SUNTRUP, Münstersche Mittelalter-Schriften, 79 (Munich, 2002), pp. 251-276 (at p. 254), following on from Hugo Kuhn and Joachim Bumke. See also in this context the multimedia article: 'Book Communities'.

⁴ The original German reads: 'Manifestationen historisch spezifischer, also in situative Handlungskontexte eingelassener Kommunikationen', STROHSCHNEIDER, 'Situationen des Textes' (see note 2), p. 66.

ing literary usage within a society which is itself in transformation.⁵ It is this completely different historical setting for such a media transformation, judged in comparison with the present day, against which the focus should be placed.6

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It goes without saying that historians must analyse the texts precisely as they have been transmitted in order to examine this dynamic process. The need to take the observed changes seriously, as required by the New Philology, becomes a central one in this context. Each act of copying a text does not so much intend to produce an exact duplicate of the original, but, in all probability, rather represents an 'updating' of the text for the current situation of use. And it is this repositioning of the text within the communicational spectrum that can be deduced by a close examination of the given manuscript. These variations, denoted by the term 'mouvance'. 8 although in the context of the New Philology it is used to refer mainly to literary texts, are not only particularly common in collections of statutes and documents, chronicles and account books, but they are often required by the very nature of the named genres themselves.

'Movements' in the text as an object of analysis may refer to a copied page with an amended page layout but otherwise with the wording unchanged, the reorganization of entries, whether in chronicles or account books, the focusing on notes and headings in the margins, which function, as

it were, as metatexts, providing information for orientation within the text, as can be seen from notarial certificates and school books, and there are many more examples. The core aspect of the new approach is that these movements should not immediately be interpreted as the manifestation of a new purpose or a new mentality — although this may indeed also be the case but that, first of all, the analysis begins at the level of the text, and it is from here that the attempt is made to position the text as part of a particular sinuation of communication, and, thence, to outline the communications setting as a whole. Only after having analysed the communications setting as a whole can further deductions be made regarding the form and the function of pragmatic literacy in the relevant period and in the relevant society.

It seems reasonable to present these textual changes by making use of the opportunities afforded us by the new media. The great advantage of a CD-ROM is that it allows us to visualize the urgency of these movements with a large degree of realism. Once available in digital form, the page or document can be 'cut up', the writing can be moved around on the 'parchment', entries can be made to move from one document to another, only to appear in a reordered form on a new page; even this text can display flexibility when a further single click subjects it to further reshaping.

There is also a further aspect. The screen page visualizes how a manuscript is created through restructuring and incorporating elements from another manuscript, in other words, how texts generate texts. This makes it possible to implement a concept which does not primarily seek to place the form of a text or even its wording with its author, but regards this more as part of a historically defined culture of literacy. On the CD, the writing and even the manuscript as such become actors and only the accompanying commentaries incorporate the significance of the writer in the process by ascribing him a role.9

Presenting the results of the research in multimedia form releases a potential that a book publication cannot provide, since the latter must use a system of comments and notes to present variations of a text. Transposing a manuscript text into a printed book renders the different nature of the former invisible for the simple reason that within a printed book and in the context

⁵ The classic study is Michael T. CLANCHY, From Memory to Written Record. England 1066–1307, 2nd edn (Oxford, 1993). See also the volume entitled *Pragmatische Dimensionen* mittelalterlicher Schriftkultur (see note 3).

⁶ This is made clear, for instance, to quote only two examples, by the fact that 'school books' in the Central and Late Middle Ages were used almost exclusively by teachers and not by pupils. The trustworthiness of Italian notary certificates was not based solely on the authenticity of the document but was bound back in a specific manner to the person of the notary and the knowledge of a 'Public'; cf. the multimedia sections on School Books and Notary Certificates, also Michael BALDZUHN, 'Schulunterricht und Verschriftlichungsprozess. Forschungsansätze und Forschungsergebnisse', in Pragmatische Dimensionen mittelalterlicher Schriftkultur, ed. by Meier et al., pp. 161-175 (at pp. 161ff.), and Petra SCHULTE, "Omnis homo sciat et audiat". Die Kontrolle kommunalen Handelns in Como im späten 12. und 13. Jahrhundert', Mélanges de l'École française de Rome. Moyen Âge 110 (1998), 501-547,

⁷ It is by virtue of the fact that they recorded the development of writing culture in the Middle Ages and paved the way towards modern book production that incunabula such as the invention of printing are to be regarded in the context of medieval manuscript culture. The role of the Broadsides presentation on this CD-ROM should be interpreted accordingly.

⁸ The idea makes use of the term first used in 1972 by Paul Zumthor; see SCHAEFER, 'Von Schreibern, Philologen und anderen Schurken' (see note 2), pp. 72ff.

⁹ Such movements are visualized in virtually every multimedia article, in particular detail in: 'Account Books' → Form; 'Episcopal Histories' → Form → chapter 'The Vita or biography: heart of the gesta episcoporum history'; 'Encyclopaedias' → Technology → chapter: 'Changes to the use of marginal notes'; 'World Chronicles' → Form → 'Text sections and ways of arranging them', and others.

of modern literacy a kind of 'fixed' status is attributed to the text. 10 Giving explanations and different readings of the texts in long footnotes cannot counter this effect, because the most they can achieve is to indicate the fluid nature, the movements of the text, via the method of description. The best a book can do is to present variations of a manuscript in a sequence, but this serves only to counteract rather than illustrate the transient and unfixed nature of that which it seeks to make clear, because now, in our culture of writing, each one of the two or three types of text are considered as 'fixed'.

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For similar reasons, the inclusion of illustrations is likely to reinforce the problem rather than provide a solution. In a book, photographically reproduced manuscript pages showing variations of a text can only be presented side by side. The central point is that these photographically reproduced manuscript pages and the illustrated texts are perhaps presented as variations, but their appearance is that of fixed pages and texts. Since the photograph is considered an authentic representation of a given object, fixed forever, it is the photographic illustration itself that works subliminally and in opposition to the description which may be provided in the explanation, and the real aim, that of illustrating the 'mouvance' is thwarted.11

Of course, by presenting the material in this way, it is not possible to breathe a measure of manuscript culture into it, but neither is this the aim. However, it most definitely is possible to render a mode of access to the manuscript which does not itself counteract that which it seeks to present through the form of its presentation. One reason for this, as previously stated, is the fact that with a CD-ROM, the manuscripts can be moved around, and thereby indeed presented as being unfixed. 12 But another aspect, which is at

least as important, is the fact that the manuscript — whether as an illustration or by way of a transcript — is now presented in the context of a medium which, in our culture — in contrast to books and photography, is attributed flexibility, ongoing and rapid transience, and, in the end, instability. 13 But it is only by using a multimedia environment such as this that the depiction of movement can be used to convey what we are trying to communicate.

Constantly recalling the differences in the nature of medieval texts when working with manuscripts, and integrating this (difference in nature) within the hounds of one's imagination is not easy, even for the historian, because such an imagination suffers from constant interference from our (present-day) understanding of writing as an instrument whose nature is fixed. The main aim of this CD-ROM is therefore neither solely to convey a concept nor exclusively to exploit the power of a CD-ROM for display purposes. The aim is rather to lay down a new understanding of medieval texts in teaching and research. 14

Concept 2:

The Structure of the CD-ROM

In the second half of the 1990s, the spread of the new media was accompanied by an intensive debate, which, on reflection, appears to have been char-

Occasional Papers, vol. I, ed. by Norman BLAKE and Peter ROBINSON (Oxford, 1993), pp. 5-18 (at p. 15).

13 It is well-known that every text written in MS Word alters its appearance depending on the printer being used. Even the articles on this CD-ROM, optimized for a monitor resolution of 800*600 dpi, take on a different appearance depending on the monitor settings. For this reason, computers are regarded as 'non-trivial' machines, because they 'do not regularly deliver the same output for the same input'. Elena Esposito, Soziales Vergessen. Formen und Medien des Gedächtnisses der Gesellschaft (Frankfurt/M., 2002), pp. 293ff. (at p. 294). It is therefore no surprise that in the context of the new media, the unambiguousness of the difference between 'authentic' and 'fictitious' becomes unstable; Siegfried J. SCHMIDT, 'Konstruktivismus als Medientheorie', in Medientheorie und die digitalen Medien, ed. Winfried NÖTH and Karin WENZ, Intervalle 2 (Kassel, 1998), pp. 21-46 (at p. 38).

¹⁴ This basis can also be used to demonstrate the functionality of the second, almost as important, characteristic of manuscript culture as well as the preformed nature and fixedness of presentation patterns, themes and topoi, and the repetitive structure of medieval texts. Thus the argumentation in: STROHSCHNEIDER, 'Situationen des Textes' (see note 2), pp. 78ff. See also Ludger Lieb, 'Eine Poetik der Wiederholung. Regeln und Funktion der Minnerede', in Text und Kultur. Mittelalterliche Literatur 1150-1450, ed. by Ursula PETERS (Stuttgart -Weimar, 2001), pp. 506-528 (at p. 518).

¹⁰ See the discussion of 'New philology' in SCHAEFER, 'Von Schreibern, Philologen und anderen Schurken' (see note 2), p. 77, where he emphasizes the otherness of a text which was once part of a medieval manuscript culture and is now embedded in a printed book, thus making it part of the 'Gutenberg galaxy'.

¹¹ This acknowledges various aspects of the modern understanding of photography, which cannot be dealt with in more detail here. In short, it can be said that in Western culture, the photograph is regarded as having great authenticity and being highly fixed in form. For instance, large press agencies regard minor instances of retouching, such as can be easily performed in digital photography, as falsifications. On the CD-ROM, an 'authentic' photograph of a manuscript page, in particular in those areas in which the writing is manipulated, cannot be found, because in the animation where changes are visualized, the item illustrated loses its status as a photograph.

¹² In the context of the CD-ROM edition of the Canterbury Tales, Norman Blake stresses that it is '[i]t will be possible to see the text as a living and developing entity'; Norman BLAKE, 'Editing the Canterbury Tales. An Overview', The Canterbury Tales Project

acterized mainly by exaggeration, both by supporters and sceptics alike. It is hardly likely that we will ever order apples via the internet although bank transactions are already commonly performed from the home computer. The daily newspaper will continue to get in the way on the breakfast table but the online review of the latest academic publications of interest will most probably be viewed on screen. Normality has prevailed and, in the context of the new media, the onset of calm has fostered the serious discussion currently taking place regarding the changes in the conditions of text production and reception.

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Whether, and to what extent, users of the new media use the links scattered throughout the text 'to compile their own texts', as was once commonly predicted, is a matter for discussion. One thing is for sure — the availability of menus and buttons do encourage users to interrupt the text they are reading and to jump to another one. 15 This serves to illustrate the great difference between the new media and essays in a bound volume, say, an anthology. Similar behaviour exists here too, of course, but it is less prevalent, and above all, its trigger is not deposited in the medium itself. Taking this mode of reception — one peculiar to the new media — as our starting point, a structure was sought for this CD-ROM with which, on the one hand, the positive potential of this method of reception could be tapped into, to create a denser presentation of the research material, and on the other, the danger could be countered of losing sight of the central themes as a result of the availability of excessive links. Our aim was expressed in terms of two requirements.

First of all, each multimedia presentation should be divided into sections, each of which could be read and understood in its own right, and this to a greater extent than in a book. These sections should contain an independent central statement, since it is perfectly possible that the reader 'jumps' to one section of a presentation (and reading only this) instead of starting from the beginning.16

The academic author who is accustomed to developing his thoughts gradually over the course of several pages may view this approach with a certain scepticism, which would be perfectly justified, since the requirement of producing a piece of writing that displays a prescribed form of segmentation can be viewed as a hindrance to the task of conveying a complex idea. But if one alters one's perspective to encompass the CD-ROM as a whole, in which the articles or sections of the article are required to fit into their respective positions, one will realize that it is best done in accordance with some kind of predetermined structure, which in turn justifies the 'restrictions' (seen from a traditional academic point of view) placed on the authors. Structural parallels to handbooks or encyclopaedia articles are apparent here, the essential difference being that in this case, the articles had to consist of largely self-contained units.

The second requirement is that the user be provided with sufficient selection options where this may appear to serve the object of gaining information on the theme of pragmatic literacy in the Middle Ages. But in those areas where it be deemed imprudent for the user to interrupt his reading, the options for exiting the respective page would be consciously kept to a minimum.

Our main aim was therefore to channel and structure the common ('traditional' in new media?) overemphasis inherent in the medium of giving the user the power to select and change location (by clicking on links) to an extent that allows a qualitative gain in information to be achieved. In the end, the open-ended nature of the medium — from the viewpoint of the user places the requirement of presenting the material in a structured manner on the producer. We developed a structure that, on the one hand, gave the authors as much freedom as possible to formulate and develop their themes, while, on the other hand, the ways of accessing the material, shown by the structure, provides the user with an initial orientation concerning the content of the CD.

¹⁵ Karin Wenz critically examines the idea of the 'Wreader', the reader apparently compiling his own text before the monitor, and thereby himself becoming an author. However, Wenz also confirms that readers often click on links before finishing reading the text on the present page; Karin WENZ, 'Vom Leser zum User? Hypertextmuster und ihr Einfluß auf das Leseverhalten', in Sprache und Datenverarbeitung. International Journal for Language Data Processing 24 (2000), 25-34. The literary studies of the 1960s and 1970s already pointed out that all texts are only constituted in the 'act of reading', the title of a classic work by Wolfgang Iser. In other words, the text is 'produced' by the receiver. The act of reception itself is not changed, only the foundation of the reception, when links that are available are used in such a way that the act of reading is no longer primarily based on a linear text.

¹⁶ Demands of this type are made repeatedly in the discussion surrounding hyptertext structures: cf. Herbert A. MEYER, 'Von Punkt zu Punkt: Skizzen zu einer Theorie der interaktiven Medien', in Medientheorie und die digitalen Medien, pp. 177-193, as well as the articles in Textproduktion. HyperText, Text, KonText, ed. by Eva Maria JAKOBS, Dagmar KNORR and Karl-Heinz POGNER, Textproduktion und Medium 5 (Frankfurt/M., 1999) (each with bibliography).

First of all, each presentation had to begin with a detailed introduction and end with a brief summary. In addition, as befitting the general theme of literacy in the Middle Ages, the main section of each multimedia presentation was divided into four segments: 'Production', 'Reception', 'Form' and 'Technology'. These, along with the two aforementioned sections, 'Introduction' and 'Abstract', comprise the six main divisions, and constitute the structural grid which leads to a certain homogeneity between the individual presentations, and allows users to navigate between the segments of the various presentations. The structural hierarchy is therefore not only available at the start of each presentation, but also as a selection menu located on the control bar of every screen. That these - compared with a handbook or encyclopaedia — far-reaching guidelines do not result in uniformity is due to the abstract nature of the selected segmentation, which itself is derived from the heterogeneity of the themes contained in the CD-ROM. Bearing in mind the great differences in the areas of research: prayer books, notarial documents, world chronicles and book illustrations, among others, it is clear that it will only be possible to locate common ground when the respective specialities of each field are disregarded and the whole area of research is viewed under the global heading of Literacy. This in turn gives each separate theme sufficient space to develop its own particular form within the prescribed main chapters. True, the terms used to label the segments are sufficiently clear to enable the non-expert to understand what they denote. Nevertheless, at this point, we will explain more clearly to what the labelling for each section refers, since the concept on which the structure is based is far more complex than it may at first sight appear.

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'Introduction': This section serves to introduce the presentation and point out the general questions of the theme, making use of a spoken text to explain and interpret the illustrations shown. The content of this section is of great importance to understanding the sections that follow.

'Production': This section is concerned with the institutions and vehicles of literacy and the circumstances surrounding the production of texts. Attention is devoted to the writers, compilers, commissioners, authors and institutional context involved, as well as the production processes, uses of sources and forms of duplication.

'Reception': This section is concerned with the uses to which the texts are put. It examines the questions of who the texts were created for, who actually read them and which institutions or bodies availed

themselves of the text. This section may also indicate whether the texts were intended for silent reading or for reading aloud, how the reading act was performed and whether the text underwent any change in function at a subsequent time.

'Form': This section takes a closer look at the structure of the text. the layout of the page and the book as a whole and its interrelationship with and reference to other texts. Lists of contents and other orientational aids may also be examined in this section, as may the changes which took place as a result of copying or duplication.

'Technology': This section is mainly concerned with the material and manual background to text production (parchment, paper, ink, quill, print production, cover, etc.). Depending on the individual areas of emphasis, this section may also include the results of research in the so-called auxiliary sciences.

'Abstract': This section recapitulates the central findings. A selective bibliography is provided to enable readers to obtain further reading material on certain aspects they may be interested in. Most of the abstracts provide a link to an article on the subject, available as a PDF-file on the CD.

It is clear from the way the main chapters are organized as content units, that certain aspects of the themes under examination could have been placed in more than one location. For example, information on the writing material used for a certain type of text may have been included either in the Technology or Production segment, and the layout of a page could have been treated in any of the four main divisions of the presentation. This is not the price that has to be paid for utilizing an abstract classification system but the result of the deliberate decision to allow flexibility in the way the segments relate to each other. The structure is not intended as a frame within which specific phenomena are assigned a fixed position under the main chapters but it provides a perspective by which the individual article illuminates such a phenomenon. For example, the phenomenon of transcribing is examined in the 'Book Communities' presentation in the 'Production' section, because it is the manual copying activity of the scribes which is under discussion. But in 'Account Books', it can be found in 'Form', because the important aspect here is the fact that the page and the book underwent restructuring — the work of the scribes is less central here.

It is this structure, this six-part segmentation that allows the editors to suggest certain types of reception to the user. For instance, the navigation menu is not accessible in the introductions, although it is constantly available in all the other segments of the presentation. This is a signal from the authors that the reader is advised to go through this section in its entirety and without interruption (it is always possible to exit the Introduction by pressing the Back button). In all of the other five sections, a small arrow is integrated within the menu bar, which allows the user to move through the section page by page. When one reaches the final page of a section, this arrow then disappears. It is not possible to jump to the next segment simply by clicking on the arrow — it can only be accessed via the selection menu. For example, if the reader is currently studying the World Chronicles presentation and reaches the end of the Production segment, the arrow that s/he had been using to progress through the section disappears. If s/he now wishes to move onto the Reception section, this can be done by way of the selection menu, by clicking on the Reception button and selecting World Chronicles.

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In this way, issuers are forced to decide how they wish to proceed each time they reach the end of a section. Either they continue to work their way through the same presentation, or they can take the alternative route and, rather than read each presentation in sequence, select certain segments from various presentations. They may, for example, decide to follow the Form segment of the Schoolbooks presentation with the same segment of the Encyclopaedias article, so as to enable them to compare directly the characteristic features of the two genres. As a result of the structural criteria discussed in the foregoing, which relates the association of a particular phenomenon within a main section not to its objective content but to the perspective under which it is discussed, it makes sense not only to compare the same segments from different presentations but also to juxtapose different segments from different presentations, for example, by reading Reception from the Book Communities presentation followed by Form from the Schoolbooks article.

In the end, it depends to a large extent on the interest of the individual user as to the order in which s/he reads the segments. The structure of the CD-ROM makes it possible to compile individual reception sequences, since on the one hand, the elements presented for selection in themselves represent closed, self-contained units, and on the other hand, no matter how heterogeneous the content may be, it is always possible to compare the segments. The fact that the sequence of the information offered presents a further source of information requires no further explanation. It is therefore hoped that the

individual reading routes will lead the user to discover new perspectives in the field of literacy in the Middle Ages, and perhaps, in turn, to formulate new auestions.

The aim of the CD-ROM is not to give the user a simple overview; it is not an electronic handbook. Rather, the multimedia presentations are designed to present new theories on the process of literacy in the Central and Late Middle Ages. A purely presentational, uniform portrayal of the topic throughout all the segments would not be appropriate. Therefore, the author of a presentation was asked to select one section which he particularly wanted to emphasize, to explain his central theses. In this section, as in the 'Introduction', extra multimedia features such as spoken text and animations are dominant. For instance, Oliver Plessow selected the 'Form' segment in his presentation on Episcospal Histories. Christel Meier chose 'Production' in her Encyclopaedias presentation, and in his presentation on Prayer Books, Thomas Lentes selected the 'Reception' segment. This gave each author the opportunity to create special areas of emphasis and to develop central themes with the aid of the opportunities offered by the multimedia environment.

As in the introduction, the main segments selected by the authors demonstrate remarkably clearly how multimedia can be exploited to present research findings in a compact and concise manner and render them open for discussion. Since the majority of the material in these sections is presented by a spoken voice, the whole of the screen page is now available to be used as a visual media stage. ¹⁷ The aim of this type of presentation is not simply to lend extra weight to a set of statements through the use of aesthetic techniques (although this 'misuse' is perfectly possible). 18 Correctly interpreted, the intention is to lend urgency to the information being conveyed and to render the outlines in enhanced clarity, so as to reduce the potential for misunderstanding. The availability of spoken text and an open screen meant that the authors' imaginations were completely unbounded, indeed, often to the chagrin of the programmers, and they certainly made great use of the opportunities afforded them in presenting their material. For instance, at certain points, the presentation zooms in on the manuscripts and certain text sections are highlighted; sections of a certificate become detached from the page and

¹⁷ Regarding the advantages of a multi-channel knowledge conveyance system see Frederic VESTER, Denken, Lernen, Vergessen. Was geht in unserem Kopf vor, wie lernt das Gehirn, und wann läßt es uns im Stich?, 27. ed. (Munich, 2000), p. 51.

¹⁸ To make things clear, the performance as such is not a speciality of the new media. In lectures, essays and books, theories are put 'in scene' as well. But in these cases the difference is that they are restricted to the single medium of language or page-layout.

placed in relation with other manuscripts; texts 'flow' into one, thereby generating new texts. 19 By incorporating sections from frescos and paintings, communicative situations in which the text may well have served its contemporary purpose can be visualized. By illuminating certain sections of the images, their stratified nature can be demonstrated, possible manners of reception visualized, and image and text made to relate to each other in new ways.20

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The forms of presentation applied to the research findings in the CD-ROM demonstrate that the benefits amount to more than just an enhanced choice of presentation methods. Unlike an article, the multimedia sequence focuses its argumentations on a visual presentation, movements in digitized manuscripts and images, actions and interactions of elements on screen, the interpretations of which are communicated through the spoken text. It is not our intention to pit the two forms against each other, but to respect their mutual strengths, differences and respective appropriateness for use in presentations. The special appeal of a CD-ROM is the fact that it offers its own, unique logical structure in which to present research findings. It is expected that not only the reception of historical research will undergo transformation as a result, for instance through the possible intensification and increased succinctness of the material, but that research activities themselves will be affected, although in a manner and to an extent which cannot yet be estimated. For the moment, the author is forced to (re)consider his thesis which he has written down on paper, in an entirely new manner.. For instance, he can no longer base his arguments on the transcriptions in the footnotes but he is now required to highlight certain sections in the digital representations of the originals. He has to allow for and work with the dynamics of image/spoken-text units, and many other factors. In other words, he has to see in his mind's eye his findings in the context of the CD-ROM and it is this aspect that commonly leads him to discover previously unnoticed implications of his own work.

The introductions and main segments are almost exclusively in the form of dense sound and image presentations, deliberately excluding interactive elements almost totally in these sections. This decision was a conscious one, since such items are all the more frequent in the remaining main chapters, most of which do not include a spoken element. Each page of these segments consists of a reading passage, which in most cases is completely contained within a single screen, that is, the length of the screen page corresponds with that of the reading page, which precludes the need for the user to scroll through the material. For the reasons discussed above, it was decided to refrain from the use of in-text links wherever possible.²¹

There are several points at which these reading pages provide access to animations and interactive applications. The texts contain the introductory material necessary for understanding these special elements, and for this reason, they are only available on the respective pages. The interactive elements may consist of original illustrations, transcriptions and translations of documents presented alongside each other, which the user is then able to examine and compare, line by line, using the Zoom function.²² Interactive maps are used to indicate the geographical extent of certain manuscript types, ²³ and of course the reading passages, animations and interactive elements are constantly concerned with the questions of what changes the texts may have undergone and what the relationships between the manuscripts were.24

The CD-ROM's modular structure resulted from the desire to co-ordinate its expected reception as far as the user is concerned with the demands of the theme of 'literacy in the Middle Ages' and the wishes of the authors. Further presentational possibilities became apparent, which were not visible during the general conceptual phase. For instance, rather than presenting the titles of the presentations in alphabetical order, the pages 'Map' and 'Timeline' could now offer the user the option of basing his selection on aspects of geography or time. The 'Thesis'-page contains a very brief description of the core of

¹⁹ Each presentation works with the texts in one or several points in a variety of ways; cf. Diocesan History → Form (in several places), City Chronicles → Technology, chapter: 'Chronicle text and document book'; Encyclopaedias - Technology, chapter: 'Changes in marginal notes'; 'Broadsides' -> Reception, chapter: 'Hieronymus Streitel's pragmatic approach'; Account Books → Form; World Chronicles → Form; School Books → Form, and others.

 $^{^{20}}$ Among many others: Prayer Books \rightarrow Form; School Books \rightarrow Form; Encyclopaedias \rightarrow Reception, chapter: 'Original and editing', and others.

²¹ See note 15.

²² Cf. Epicospal Histories → Reception, chapter 'City and bishop in conflict'; Notary documents -> Production, chapter: 'The "publicationes", and so forth.

²³ World Chronicles→ Reception, chapter: 'The audience of a papal-imperial chronicler', Episcopal histories -> Production, chapter: 'A North German perspective of the chronicle'.

²⁴ City Chronicles → Technology, chapter: 'Chronicle Text and Document Book'; Account Books → Technology, chapter: 'Cultural determination of writing techniques'.

each presentation, allowing the user to access the point in the presentation at which the theme is developed.

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We expect this CD-ROM to be used in the vast majority of cases on home computers. The many multimedia applications with and without a spoken text and the numerous manuscripts which are offered both in transcription and translation can also be shown in a classroom or seminar situation by means of a digital projector. All of the reading and spoken texts are available as text files in the CD-ROM, to allow for the preparation of classes using these materials or for use as handouts.²⁵

In addition to the multimedia articles, the CD-ROM includes a further eighteen articles in text file form. These texts represent the work carried out in the SFB between 1988 and 2002 and have been published in a variety of miscellanies and journals. There is also a comprehensive bibliography of the works produced by the SFB. The multimedia articles, essays and bibliography together represent an overview of the entire research performed in Münster on the subject of pragmatic literacy.

Each mode of presentation — the multimedia presentations and the anthology of essays — conveys its research findings in its own inherent manner and with its specific presentation and reception methods. Like print media and radio, they are not in competition with each other but should be regarded as mutually complementary media. Each has its own peculiar strengths which can be called upon to assist in unfolding complex historical contexts. For this reason, it is hoped that the multimedia presentation form will establish itself alongside the traditional print media forms such as essays and books, whenever choices have to be made regarding the mode of presentation of historical themes.

APPENDIX: ESSAYS ON THE CD-ROM (IN PDF FORMAT)

Althoff, Gerd: 'Causa scribendi und Darstellungsabsicht: Die Lebensbeschreibungen der Königin Mathilde und andere Beispiele', in Michael Borgolte and Herrad Spilling (eds), Litterae Medii Aevi. Festschrift für Johanne Autenrieth zu ihrem 65. Geburtstag (Sigmaringen, 1988), pp. 117-133.

Angenendt, Arnold: Thomas Braucks, Rolf Busch, Thomas Lentes and Hubertus Lutterbach: 'Gezählte Frömmigkeit', Frühmittelalterliche Studien 29 (1995), 1-71.

Arlinghaus, Franz-Josef: 'Die Bedeutung des Mediums 'Schrift' für die unterschiedliche Entwicklung deuscher und italienischer Rechnungsbücher', in Walter Pohl and Paul Herold (eds), Vom Nutzen des Schreibens, Forschungen zur Geschichte des Mittelalters, 5 (Vienna, 2002), pp. 237–268.

Baldzuhn, Michael: 'Schulunterricht und Verschriftlichungsprozess. Forschungsansätze und Forschungsergebnisse', in Christel Meier, Volker Honemann, Hagen Keller and Rudolf Suntrup (eds), Pragmatische Dimensionen mittelalterlicher Schriftkultur. Akten des Internationalen Kolloquiums des Sonderforschungsbereichs 231, 26.-29. Mai 1999, Münstersche Mittelalter-Schriften, 80 (Munich, 2002), pp. 161–175.

Blattmann, Marita: 'Über die 'Materialität' von Rechtstexten', Frühmittelalterliche Studien 28 (1994), 333-354.

Griese, Sabine, Volker Honemann: 'Zauber — Segen — Katechese. Position und Leistung der xylographischen Einblattdrucke in der Medienwelt des 15. Jahrhunderts', in Christel Meier, Volker Honemann, Hagen Keller and Rudolf Suntrup (eds), Pragmatische Dimensionen mittelalterlicher Schriftkultur. Akten des Internationalen Kolloquiums des Sonderforschungsbereichs 231, 26.-29. Mai 1999, Münstersche Mittelalter-Schriften, 80 (Munich, 2002), pp. 233-249.

Johanek, Peter: 'Historiographie, Bild und Denkmal in der Geschichtsüberlieferung des Mittelalters', in Jaroslaw Wenta (ed.), Die Geschichtsschreibung in Mitteleuropa, Subsidia historiographica, 1 (Torun, 1999), pp. 87–109.

²⁵ Menu item: 'Select → Article as Text'.

Johanek, Peter: 'Anmerkungen zur Stadtgeschichtsschreibung' (slightly shortened and adapted version of the introduction to the collection 'Städtische Geschichtsschreibung im Spätmittelalter und in der frühen Neuzeit', ed. by Peter Johanek, Städteforschung A 47 [Cologne and elsewhere, 2000], pp. VII–XIX).

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- Keller, Hagen: 'Vom 'heiligen Buch' zur 'Buchführung' Lebensfunktionen der Schrift im Mittelalter', Frühmittelalterliche Studien 26 (1992), 1-31.
- Meier, Christel: 'Illustration und Textcorpus. Zu kommunikations- und ordnungsfunktionalen Aspekten der Bilder in den mittelalterlichen Enzyklopädiehandschriften', Frühmittelalterliche Studien 31 (1997), 2-31. (Illustrations from article)
- Meier, Christel: 'Bilder der Wissenschaft. Die Illustration des 'Speculum maius' von Vinzenz von Beauvais im enzyklopädischen Kontext', Frühmittelalterliche Studien 33 (1999), 252-286. (Illustrations from article)
- Melville, Gert: 'Zur Funktion der Schriftlichkeit im institutionellen Gefüge mittelalterlicher Orden', Frühmittelalterliche Studien 25 (1991), 391-417.
- Müller, Jan-Dirk: 'Bild Vers Prosakommentar am Beispiel von Fechtbüchern. Probleme der Verschriftlichung einer schriftlosen Praxis' in Hagen Keller, Klaus Grubmüller and Nikolaus Staubach (eds), Prag-matische Schriftlichkeit im Mittelalter. Erscheinungsformen und Entwicklungsstufen, Münstersche Mittelalter-Schriften, 65 (Munich, 1992), pp. 251-282.
- Müller-Oberhäuser, Gabriele: 'Buchmarkt und Laienlektüre im englischen Frühdruck: William Caxton und die Tradierung der mittelenglischen Courtesy Books', in Thomas Kock and Rita Schlusemann (eds), Laienlektüre und Buchmarkt im späten Mittelalter, Gesellschaft, Kultur und Schrift — Mediävistische Beiträge, 5 (Frankfurt/M., 1997), pp. 61-107.
- Schmidt-Wiegand, Ruth: 'Recht und Gesetz im Spannungsfeld zwischen Schriftlichkeit und Mündlichkeit im Mittelalter', Frühmittelalterliche Studien 27 (1993), 147-166.

- Schulte, Petra: "Omnis homo sciat et audiat". Die Kontrolle kommunalen Handelns in Como im späten 12. und 13. Jahrhundert', Mélanges de l'École française de Rome. Moyen Âge 110 (1998), 501-547.
- Staubach, Nikolaus, 'Text als Prozeß, Zur Pragmatik des Schreibens und Lesens in der Devotio moderna', in Christel Meier, Volker Honemann, Hagen Keller and Rudolf Suntrup (eds), Pragmatische Dimensionen mittelalterlicher Schriftkultur. Akten des Internationalen Kolloquiums des Sonderforschungsbereichs 231, 26.-29. Mai 1999, Münstersche Mittelalter-Schriften, 80 (Munich, 2002), pp. 251-276.
- Worstbrock, Franz Josef: 'Die Anfänge der mittelalterlichen Ars dictandi', Frühmittelalterliche Studien 23 (1989), 1-42.