

THE  
ARCHAEOLOGY  
OF  
MEDIÆVAL  
BOOKBINDING

J. A. SZIRMAT

# Contents

Preface and acknowledgments	ix
Abbreviations	xv
<b>Part I The Mediterranean heritage</b>	
Introduction	3
Notes	5
<b>Chapter 1 The first single-quire Coptic codices</b>	7
1.1 Introduction	7
1.2 The covers of the Nag Hammadi codices	7
1.3 Cover attachment	10
1.4 Typology of the Nag Hammadi codices	11
1.5 Other single-quire codices	13
1.6 The bookblock	12
Notes	13
<b>Chapter 2 The first multi-quire Coptic codices</b>	15
2.1 Introduction	15
2.2 The lick stitch	16
2.3 Sewing	19
2.4 Edge treatment, endbands and boards	23
2.5 Fastenings and other appendages	26
2.6 Papyrus codices with pasteboard covers	28
Notes	30
<b>Chapter 3 Late Coptic codices</b>	33
3.1 Introduction	32
3.2 Sewing	33
3.3 Boards and their attachment	44
3.4 Spine lining and edge trimming	38
3.5 Endbands	39
3.6 Covering	40
3.7 Fastenings and other appendages	41
Notes	43

<b>Chapter 4 The Ethiopian codex</b>	<b>45</b>
4.1 Introduction	45
4.2 Sewing and board attachment	46
4.3 Boards and covering	48
4.4 Endbands	49
4.5 Functional aspects	50
Notes	50
<b>Chapter 5 The Islamic codex</b>	<b>51</b>
5.1 Introduction	51
5.2 Typology of the early Islamic codices	52
5.3 Sewing, boards and their attachment	53
5.4 Endbands	57
5.5 Covering, decoration and fastenings	59
Notes	60
<b>Chapter 6 Byzantine codices</b>	<b>62</b>
6.1 Introduction	62
6.2 Rootblocks, endleaves and sewing stations	64
6.3 Sewing	67
6.4 Methods of board attachment	69
6.5 Boards	73
6.6 Spine treatment and trimming	75
6.7 Endbands	76
6.8 Covering and decoration	78
6.9 Fastenings and furnishings	81
6.10 Repair and re-binding	83
6.11 'Macedonian' bindings	84
6.12 Armenian bindings	87
Notes	93
<b>Part II The medieval codex in the Western world</b>	
Introduction	95
Notes	98
<b>Chapter 7 Carolingian bindings</b>	<b>99</b>
7.1 Early literature and recent studies	99
7.2 Introduction of the sewing support	100
7.3 Boards and board attachment	103
7.4 Sewing	112
7.5 Endleaves	117
7.6 Edge trimming	119
7.7 Endbands	121

7.8	Covering and decoration	127
7.9	Fastenings	131
7.10	Functional aspects and repairs	132
	Notes	137
<b>Chapter 8</b>	<b>Romanesque bindings</b>	<b>140</b>
8.1	Introduction of the sewing frame	140
8.2	Early literature and recent studies	140
8.3	Bookblock and sewing stations	142
8.4	Endleaves	146
8.5	Sewing	147
8.6	Boards and board attachment	151
8.7	Edge trimming	157
8.8	Spine treatment	157
8.9	Endbands	159
8.10	Covering and decoration	162
8.11	Fastenings and furnishings	167
8.12	Functional aspects	169
	Notes	171
<b>Chapter 9</b>	<b>Gothic bindings</b>	<b>173</b>
9.1	Introduction	173
9.2	Early literature and recent studies	174
9.3	Textblock and endleaves	176
9.4	Sewing	180
9.5	Spine treatment	190
9.6	Edge trimming	197
9.7	Endbands	203
9.8	Boards and board attachment	216
9.9	Covering	225
9.10	Techniques of decoration	241
9.11	Fastenings	251
9.12	Furnishings	267
9.13	Functional aspects	271
	Notes	275
<b>Chapter 10</b>	<b>Liturgical bindings</b>	<b>285</b>
10.1	Introduction	285
10.2	Bookblock attachment by primary tacketing	287
10.3	Bookblock attachment by primary sewing	291
10.4	Primary sewing through rigid back plates	297
10.5	Bookblock attachment by secondary tacketing	304
10.6	Ledger bindings	309

---

10.7 Attachment by lacing-in the sewing supports	311
Notes	317
<b>Bibliography</b>	<b>320</b>
<b>Index</b>	<b>346</b>

## Preface and acknowledgements

This book evolved from a series of lectures on the archaeology of bookbinding, that I gave as Visiting Professor on behalf of the Dr P.A. Thiele Stichting, at the University of Amsterdam during the winter term of 1987. I light-heartedly accepted the assignment, assuming that it would be easy to fill the many gaps in my knowledge by consulting the big handbooks, which I expected to find in Amsterdam University Library, renowned for its rich collections in the field of book sciences. The shock came when I found that the handbooks weren't there, for the simple reason that they did not exist. Except for Middleton's (1963) book devoted to English bookbinding techniques of mainly the post-medieval period, we have no comprehensive work on medieval bindings. It was indeed a shock to be faced with a virtual absence of information about the book's physical structure which is so fundamental for its function, the safeguarding of its integrity and its ultimate survival.

It seems as if binding structures shared the fate of many utilitarian objects of a protective nature: on becoming worn out and damaged after fulfilling their function they landed on the rubbish heap, just like rundown shoes and ragged clothing. Of no interest to their contemporaries, such objects eventually, after long centuries, became the concern of archaeologists. Many bindings, however, have been lost through rebinding, not because of wear and tear but because they failed to survive with the taste of the times and their owners, or washed with a style of furniture. Since the Renaissance, this practice has been observed by countless book collectors and bibliophiles and has resulted in the annihilation of thousands of medieval bindings. Neglect and ruthless restorations have also caused considerable losses, leaving us today with no more than one to five per cent of original bindings on the surviving medieval books – an incalculable loss for the history of the book.

Ironically, the aesthetic aspects of bookbindings inspired the earliest attempts to cast a scholarly eye on them. Their decoration was the subject of the first studies such as those of Waale (1891–8) in England and Sawwleke (1898) in Germany, to be followed by a great number of scholars for a century to come. Focusing attention on the embellishment of the covers, with rubrics of the stamped decoration as the basic working tool and instrument to identify bindings and their origins, a new branch of book research was created in which *Einbandkunde* seemed to be the proper term. Yet the term – without appropriate equivalents in other languages – disguised the fact that it merely covered the history of the exterior of the book, its outward appearance, utterly neglecting the internal structure. Proof of the literature, be it concise like Bradauer's (1986) overview with 195 references or the almost complete bibliography of Schmidt-Kossmüller (1987) with 8000 entries, reveals that no more than 10 per cent is concerned with binding techniques and binding structures.

Whereas the majority of scholars of previous generations avoided the structural aspects, exceptions must be acknowledged: Theodor Gottlieb (1869–1929), Ernst Philip Goldschmidt (1887–1954), Theodore C. Petersen (1883–1966) and Graham Pollard (1906–1976) are among those who were eager to uncover technical details hidden under the outer lustre, admittedly an arduous task for the uninitiated in the craft. For craftsmen, examination of their own past had been easier, and we owe gratitude for the wealth of observations recorded by binders like Paul Adam (1849–1931) and Berthe van Kegermetter (1879–1964). But even they sometimes lost their footing on the slippery road and could not avoid fallacies. As pioneers are torchbearers, they themselves are easily blinded; yet their achievements deserve to be honoured by careful and critical reassessment of their work rather than by perpetuation of their mistakes in blind admiration of their authority. Misconceptions of the past tend to persist especially when progress is slow, as indeed it has been: Weale (1894–8) used 38 pages of a total of 484 (8 per cent) for a concise, lucidly illustrated and essentially still valid technical introduction; one hundred years later, a recent *Lehrbuch* (Mazel 1997) of 516 pages offers the reader 30 pages (5.8 per cent) on the techniques of binding and decoration, most of it rehashed biases and downright falsehoods, with hardly any basic information.

It is high time that we, leaving behind us and rejecting the errors and shortcomings of our predecessors, focus critical attention on what should be undertaken today to make up for past negligence. First of all, we must make sure not to lose those very few objects left which we so badly need for our research. We must, however late, at last respond to warnings we failed to take seriously. Fle Wattenbach's (1871 p. 231): '*Ey ist immer ein grosser Barbarer, wenn man, was das besonders in früher Zeit häufig geschähen ist, ohne Noth die unersetzlichen Leihbände zerstört*', or as expressed by Goldschmidt (1928 p. 124): 'Our knowledge [...] is far too limited to permit us to judge what essential data we may be destroying when we allow an old book to be handed over to a binder "to be restored"'. There is no such thing as restoring an old binding without obliterating its entire history'. It is satisfying that there are some signs of progress: the disdain for bookbinding as a subject unworthy of any scientific interest is gradually decreasing, and codicologists and bibliographers are beginning to appreciate that the physical evidence associated with binding structures contains irreplaceable information (Frost 1993; Rodney 1994). Book restorers and conservators likewise are starting to perceive that old binding structures are a rich source of knowledge and insight, and a dependable guide in dealing with the aged objects entrusted to their care. Here a great deal of credit must go to Roger Powell (1896–1990), only recently honoured with a posthumous *Preiswürdig* (see Sharpe 1996b); his respectful approach to dealing with these fragile ancient manuscripts has become the inspiration to a new generation of learned conservators, among them Christopher Clarkson and Nicholas Pickwood.

Growing concern with preservation of medieval bindings is attested by undertakings such as the census initiated in the early 1980s by the Istituto centrale per la patologia del libro in Rome, an ambitious project still in process (Federici 1986; 1990–91; 1993; 1997; Federici and Pustalichio 1992; Sturani and Marafioti 1996), similar projects, of a slightly smaller scope, are under way in England (Sheppard 1989; 1990) and in France

(Vezin 1990; Grosdidier de Matons, Hoffmann and Vezin 1993). A project of cataloguing bindings in major French libraries is an outcome of this interest; its first volume (Alexandre and Maître 1998, describing *Le médiéval* bindings of *Annuaire Bibliothèque municipale*) was published too late to be dealt with in this book. In Germany, where an ambitious proposal to register historic bindings was made in the late 1920s but never carried out, a new effort has been taking shape in recent years which envisages a census encompassing both decorative and structural aspects (Ottermann 1997). Positive as such endeavours seem in the era of the electronic media, one must hope that they will not disturb the peace so beneficial to those tender veterans. Having seen a considerable number of carolingian bindings still in pristine condition mainly because they have been left alone for a millennium, but having witnessed that in my lifetime the Domesday Book has twice gone through the ordeal of a complete rebinding, I must confess a lack of wisdom as to the optimal way to gather knowledge without causing damage to these precious archaeological objects.

\* \* \*

This book attempts to trace the evolution of the physical structure of the book in codex form, from its invention in the early centuries of our era to the end of the sixteenth century, a period I have arbitrarily designated as medieval. The subdivision into ten chapters follows a pattern of typological entities, defined on the basis of occurrence of a set of physical characteristics, partly confined within geographical and chronological boundaries. The chapters are based on the available literature, from which the major part of the data on binding structures is derived. My own studies encompass no more than about one thousand bindings, an exceedingly small number, further biased by the fact that the majority originates in Central and Western Europe; England is represented by a minute sample, Southern Europe hardly at all. Collected within the last ten years, the presentation of such limited results can only be excused by the fact that more than one human lifetime would be required to complete such an undertaking. I am keenly aware of the shortcomings of my work, bound to be provisional and incomplete in view of the lack of adequate primary research; I have decided to publish this imperfect study simply because otherwise the few building blocks I have gathered would be buried, and future scholars denied the opportunity to correct my mistakes.

\* \* \*

This book could not have been written without firsthand experience with the binder's craft. I owe my professional training in bookbinding, beginning in 1971, to Martin Jaegle of the *Centro del bel libro* in Ascona, who answered many of my queries but often failed to do so; I am especially indebted for the latter, since it planted the seed of a 25-year quest for the reasons why bookbinders did what they did. I gathered the courage to undertake the writing of this book while lecturing on the subject at the University of Amsterdam, an adventure aided by warm support of Professor Ernst Braches, Ton Croiset van Uchelen and Kees Guiterep of the Amsterdam University Library: the privileged visits to its stacks helped me to devise a methodology for studying binding structures. A unique exercise and perfect training was the work on a Dutch terminology for describing old bindings, undertaken in



collaboration with Professor Peter Gumbert and Kees Gritter (Gritter, Gumbert and Schmal 1992). It taught me that terminological clarity is a prerequisite for precise recording of observations on binding structures, the lack of an established and uniform English terminology prevented me from achieving the precision I would have desired. The absence of a glossary in this highly technical text is deliberate: glossaries are bound to remain, despite brave intentions and much effort, subjective lists of a given author's preferences, witness the recent compilation by Greenfield (1995). What is really needed is a systematic vocabulary, which can only be worked out and agreed upon by a team of specialists. This book can do no more than to demonstrate the urgent need for a generally accepted uniform terminology and to provide some basic building blocks.

In addition to the resources of the Amsterdam University Library, I gathered the core of the material for this book between 1989 and 1993 at the St. Gall Stiftsbibliothek, where Professor Peter Ochslein granted me the privilege of examining the treasure of several hundreds of original medieval bindings. I also owe thanks to the St. Martin Kirche Walsburgskerk in Zuzphofen, where, acting as adviser between 1989 and 1996 for the restoration project, I collected a wealth of data on the fifteenth- and sixteenth-century bindings of this unique chained library. I was given generous access to study material in the collections of many other institutions. These are: Amsterdam, Bibliotheca Philosophica Hermetica; Basle, Universitätsbibliothek; Berlin, Staatsbibliothek Preussischer Kulturbesitz; Budapest, Országos Széchényi Könyvtár; Cambridge, University Library; Daecester, Adamantia Bibliothek; Düsseldorf, Kunstmuseum; Graz, Universitätsbibliothek; Hereford, Cathedral Library; Karlsruhe, Badische Landesbibliothek; Leiden, Bibliothek der Rijksuniversiteit; London, The British Library, Victoria and Albert Museum; Munich, Bayerische Staatsbibliothek; New York, The Pierpont Morgan Library; Nijmegen, Universiteitsbibliothek; Oxford, Bodleian Library; Schönbühren, Stadtbibliothek; Strasbourg, The Schön Library; The Hague, Koninklijke Bibliotheek, Museum Meermanno-Wevermanant; Tübingen, Universitätsbibliothek; Utrecht, Universiteitsbibliothek; Vienna, Österreichische Nationalbibliothek; Wolfenbüttel, Herzog August Bibliothek; Zurich, Zentralbibliothek and Zuzphofen, Gemeindefachrat.

I owe thanks to a great many people who helped me to study bindings under their care, providing me with information, answering my queries or drawing my attention to special bindings and literary data and allowing me to consult unpublished manuscripts. They are: Arnold C. Balsam, Dr B.C. Barber Hatfield, Dr Jos A.A.M. Bemens, Giampiero Bozzarchi, Dr Christian Coppens, Dr François Dérozier, Ursula Dreißholz, Deborah Evans, Professor Carlo Federici, Barbara Fischer, Professor Stefan Fogelmark, Dr Mirjam M. Foot, Dr Rudolf Grotzer, Dr Martin Gumbert, Professor D. Harlfinger, Dr Hermann Harauer, G.B. Hartman, Barbara Hassel, Dr H. Haka, Dr Philippe Hoffmann-Koert van der Horst, Dr Eva Iršich, Professor Frans A. Jansen, Beatrix Kastaly, Professor Martin Krause, James B. Lawson, Idellette van Laerwen, Dr Vanessa C. Marshall, Dr Ursula Meinde, Dr Sylvie Meriam, Manfred Mayer, Bernard C. Middleton, Professor Wolfgang Milsa, Dr Irina Mokrenkova, Professor Peter F.J. Othema, Angelika Pabel, Dag-Ernst Petersen, Guy Peberhennige, Dr Konrad von Rahmou, Karl Ruggli, Jayne S. Ringrose, Dr Marianna Rovombai, Marliese Schack, Helma Schaefer, Dr Irnhild Schärer, Karl

Schm.Ék, Brian C. Schuyteler, Fazl H. Shifadeh, Marjanna S. Simpson, Wim J.Th. Smit, Dr René Spiccia, Dr Gerhard Stamm, Professor Martin Stämann, Dr Jan Storm van Leeuwen, Martin Studel, Professeur Jean Véziny, William Vukob, Dr Rowan Watson, Dr Konrad Weidemann, Alfred Wellhausen, Joan Williams, Dr J.J. Witkam, Gérard J.M. Wouters and W.C.M. Wurtefeld.

\* \* \*

This book has greatly benefited from the support and help of friends to whom I wish to express my gratitude. Dr Gerd Brinkhus, Sister Lucie M. Gimbrère OSB, Professor Peter Grumbert and Jacqueline Kiang were prepared to read the whole text critically; parts of it were read by Fred Beaman, Ursula Diehlutz and Michael Gullick. Betsy Palmer-Elshilge reviewed the portions concerning the sewing in Part I and offered valuable suggestions for terminology; an extensive dialogue with Fred Beaman on terminological issues helped to clarify many obscure points and so did suggestions and comments by Christopher Clarkson, Dr Nicolas Pickwood and Dr Jennifer Sheppard. I did not always follow their advice and I am solely responsible for errors and shortcomings. It is a pleasure to chart my deep gratitude to Rudolf Smeets for his aid in collecting the bibliography, locating obscure references, checking bibliographical data, assisting with the electronic typescript and compiling the index: I am greatly indebted to Elke E. Düntfeld, MA, for her wholehearted help with the last revision: her critical reading of the final text resulted in a substantially improved presentation.

I wish to express my thanks to the following individuals and institutions for providing illustrations and granting permission to reproduce them: Anderson-Lovellace / The Red Gulf Press (figures 7.6, 7.11, 7.15, 7.17, 7.20, 7.31, 7.23, 7.28 [g to j], 7.27, 7.31, 7.32, 7.33, 7.34); Arhiv Republike Slovenije, Ljubljana (10.24); Ars Orientalis, Michigan (2.7, 3.1, 3.7 a); Badische Landesbibliothek, Karlsruhe (7.2); President and Council of the Bibliographical Society, London (2.2); Brill Publishers, Leiden (1.1, 9.30, 10.17 [b], 10.26, 10.27); Deutsche Bücherz., Leipzig (7.19); Professor Carlo Fedarici, Rome (6.11); Barbara Fischer, Munich (5.4); Gemeentearchief, Haarlem (8.11); Germanisches Nationalmuseum, Nuremberg (9.60); Dr A.J. Geurts, NL Almere (6.4), Garenberg-Jastruch (9.41); Herzog August Bibliothek, Wolfenbüttel (10.12, 10.14); Imprensa Nacional-Casa da Moeda, Lisbon (8.32); The Institute of Paper Conservation (7.25); Munkegaard International Publishers, Copenhagen (5.4); Professor A.A. Nascimento, Lisbon (8.22); Presteli Palombi Editori, Rome (6.11); Dag-Ernst Petersen, Wolfenbüttel (10.12, 10.14); The Pierpont Morgan Library, New York (2.5, 3.4, 3.7 [b]); Helma Schäfer, Leipzig (7.19); Staatsbibliothek Bamberg (5.1), Universitätsbibliothek, Würzburg (10.5) and Jedert Vodopivec, Ljubljana (10.24).

\* \* \*

The publication of this book was considerably delayed due to poor health, which has put high demands on those closely involved with its completion, and I thank Ashgate Publishing for their understanding and patience. But above all I am deeply indebted to my wife Mía, who joined in from the very beginning of our bookbinding adventure and con-

vided her support to the very end, listening, reading and critically accompanying the evolution of this work: it is also her book.

J.A. Scirms  
NT, One creek, March 1998

## Abbreviations

Dates are abbreviated by the convention s. (*vossloo*) and a roman numeral for the century, followed by in., med., or ex. in superscript, indicating the beginning, middle or the end of a century, or by superscript numbers 1 or 2 for the first or second half. Transition between two centuries is indicated by an oblique stroke; for example, s. xiii<sup>1</sup>, s. xiii<sup>2</sup>, s. xiv<sup>1</sup>.

Statistical symbols used are  $r$  (correlation coefficient),  $s.d.$  (standard deviation),  $\chi^2$  refers to the chi-square test for independence (Harnett 1982 pp. 708 ff.); values of  $\chi^2$  above 3.84 were considered significant at  $\alpha = 0.05$ .

Institutions are abbreviated as follows:

AB	Alte Universitätsbibliothek, Davenport
BA	Biblioteca Ambrosiana, Milan
BG	Bibliothèque générale
BL	British Library, London
BLB	Badische Landesbibliothek, Karlsruhe
BM	Bibliothèque municipale
BN	Biblioteca Nazionale, Bibliothèque nationale, Biblioteca Nazionale
BNF	Bibliothèque nationale de France, Paris
Bodley	Bodley's Library, Oxford
Bodmer	Bibliotheca Bodmeriana, Geneva
BR	Bibliothèque Royale, Brussels
BSE	Bayerische Staatsbibliothek, Munich
CL	Cathedral Library
GA	Gemeinde Aulhof
GHB	Gesamthochschulbibliothek, Kassel
GNM	Germanisches Nationalmuseum, Nuremberg
HAB	Herzog August Bibliothek, Wolfenbüttel
HLB	Hessische Landesbibliothek, Fulda
HUBB	Hessische Landes- und Hochschulbibliothek, Darmstadt
KB	Königliche Bibliothek, Koninklijke Bibliotheek
KM	Kunstmuseum
LB	Landesbibliothek
Lfr.	Libraria St Walburgskerk, Zutphen
MCC	Museum E. Catharijconvent, Utrecht
MMW	Museum Maurmann-Westreeniaann, The Hague
ÖNB	Österreichische Nationalbibliothek, Vienna
OSzK	Országos Széchenyi Könyvtár, Budapest

PML	Pierpont Morgan Library, New York
PRO	Public Record Office, London
RMO	Rijksmuseum voor Oudheden, Leiden
SB	Stadtbibliothek
SBJ	Staatsbibliothek zu Berlin
SBPK	Staatshbibliothek Preussischer Kulturbesitz, Berlin
StB	Stadtbibliothek
StH	Stiftsbibliothek
UB	Universitätsbibliothek, Universitätsbibliothek
UL	University Library
ULB	Universitäts- und Landesbibliothek
V&A	Victoria and Albert Museum Library, London
Vat.	Bibliotheca Apostolica Vaticana, Vatican City
W&J	Wissenschaftliche Allgemeinbibliothek, Linhart
WAG	Walters Art Gallery, Baltimore
ZB	Zentralbibliothek, Zurich

---

## Part I The Mediterranean heritage

# Introduction

The appearance of the codex can be traced to the first centuries of Christianity. Only indirect evidence points to its still earlier existence during the Hittite empire. Reliefs on stelae dating from the eighth century BC, excavated in Marash (south-east Turkey), depict codex-like objects with lines along the spine which resemble the board attachment of Coptic and Byzantine codices. Together with the images of a brush and double inkwell these representations are highly suggestive but still have to remain conjectural until archaeological evidence proves their former existence.<sup>1</sup>

Archaeological finds support the assumption that the codex first began to replace the scroll in the eastern part of the Mediterranean basin. The codex seems to have been the preferred book form of the new religion. While 83 per cent of 290 Christian texts dating from the first four centuries were already bound in codex form, 88 per cent of 2435 Greek literary texts from the same period retained the traditional roll form.<sup>2</sup> However, the evidence from the several hundred early fragments that have come down to us, badly damaged due to the ravages of time and natural deterioration of organic materials, is limited almost exclusively to conclusions about the format and not the physical structure of the codex. But perhaps even more has been lost by the neglect and disinterest of scholars of previous generations, who were principally concerned with the texts. This neglect of the physical aspects of the construction of the codex is reflected in recent studies on the subject. H.G. Turner in *The Typology of the Early Codex* (1977, pp. XXI-XXII) acknowledges that he has 'nothing to say on the subject of bindings, and that is a weakness'; in another eminent work, *The Birth of the Codex* by C.H. Roberts and T.C. Skeat (1983), not a single line is devoted to binding structures.

Much ink has been spilt in little profit over the idea, promulgated for more than a century, that the codex was modelled on the example of writing tablets. Since this idea was first introduced by Wattenbach (1871, p. 111), it has been reiterated by countless authors; authorities continue to assure us that 'there has never been any doubt about the physical origin of the codex, namely that it was developed from the wooden writing tablet' (Roberts and Skeat 1983, p. 1). Tablets of wood or other materials, with or without wax on the writing surface and joined in sets of two, three or more, have been used for recording laws, accounts, school exercises and various epigrams, from the Middle East to Britain and from Egypt to Scandinavia and northern Russia, and from the Bronze Age up to the nineteenth century. Even if there is evidence that whole literary texts have been recorded on wooden papyrus (Shafer 1996b), the crude methods of connecting the rigid elements of a set of tablets (using hinges, metal rings or lacings) have nothing in common with the structures employed to join leaves of a codex. The derivation of the codex from the writing tablet is a

surmise *a silvano*: too long its validity has been taken for granted without scrutiny of the exact nature of the relationship (Kretz [1955]; Szirmai 1996b).<sup>3</sup>

There is another persistent tradition that the codex evolved from the parchment notebook of the ancient Romans (*quadrans notarius*). However, this contention has hardly any archaeological support: the evidence is entirely literary, based on texts of classical authors like Martial (an. 40–104), whose eloquent praise of the advantages of the new book form over the roll provided fertile ground for speculation.<sup>4</sup>

In the following chapters, physical evidence will be the guide to track the evolution and the spread of the early codex throughout the literate world of that age, which was, in fact, the world of Eastern Christianity. The Coptic Church seems to have been the cradle of the single-quire (Chapter 1) and multi-quire codex (Chapters 2 and 3), which were later nurtured in the first coenobitic monasteries; it is the Egyptian sand that preserved the earliest physical evidence. Probably the Coptic Church had brought the new religion to Nubia and Ethiopia, the latter becoming isolated for a millennium and keeping the ancient codex form virtually unchanged (Chapter 4).

With Constantine's inauguration of Constantinople as the new capital of the Roman Empire in AD 330, Christianity gradually established itself as the official religion of a realm comprising the east: Balkans and Asia Minor. In the sixth century, under the patriarchs of Rome, Constantinople, Alexandria, Antioch and Jerusalem, when Christianity had become more organized, it was at the same time troubled by theological controversies. These led to dissent and alienation in the Monophysite Churches of Egypt, Syria, Armenia, and the Church of the Nestorians. The missionaries of these churches took Christianity, and with it its book form, deep into Asia.<sup>5</sup> The Manicheans, too, had adopted the codex and likewise, though earlier, carried it with them into Turkestan and Central Asia.<sup>6</sup> Christianity radiated from Byzantium and also spread to the West and North into the Slavic world: Saints Cyril and Methodius attempted to bring it to Moravia in the ninth century; Russia was Christianized in the tenth century and became the stronghold of the Orthodox Church after the Fall of Constantinople to the Turks in 1453. This fatal event seems to have been the cause of a general exodus of Byzantine scholarship to the West; oriental craftsmen from Greece and the Near East migrated to Italy and brought with them the Byzantine codex which the Western binder eventually transmuted into the 'alla greca' binding. This clearly demonstrates the influence of the Mediterranean heritage on the Western binding tradition.

The Fall of Constantinople was the end of the Byzantine Empire, but its decline began much earlier; in the seventh century Alexandria and Antioch fell into Moslem hands, and in the next hundred years Islam conquered North Africa and Spain and gradually occupied Asia Minor and the Balkans. Islam, the second largest religion emanating from the Mediterranean cultural basin, naturally adopted the codex as its book form (Chapter 5); the Arabic bookbinders introduced parchment, replacing the heavy wooden board, the principle of case binding and perfected decoration techniques like gold tooling. These innovations eventually reached the Western world, most probably through Spain and Italy, and significantly influenced Western binding techniques.

But, what about the codex form in another significant – and even more ancient –



religious realm: that of the Jewish world, centred in the birthplace of the first codex? As no early codices or Hebrew manuscripts seem to have survived, it remains unclear when this book form was adopted. The earliest papyrus fragments, which might have come from codices, date from the fourth century; the earliest Hebrew biblical codices are ascribed to the eighth or ninth century (Dixinger 1953 pp. 321–26), but have lost their original bindings. This scarcity has different causes: although the scroll was the obligatory form for many Jewish religious texts (as it still is today), there is no doubt that the codex played its role in its own right. Obviously, two millennia of zealotry and continuing efforts to annihilate Jewish literature have resulted in irretrievable losses. Yet, Jewish communities themselves had the practice of withdrawing defective manuscripts from circulation by depositing them in the ‘Geniza’ in the synagogue, to have them buried later in a religious ceremony (Dixinger 1953 p. 326; Dezel 1966 pp. 351–81). These storehouses turned out to be real treasure troves of early manuscripts and binding fragments, as in the case of the famous Cairo Geniza. It is highly regrettable that virtually no effort has been made so far to explore this rich source of early binding structures.

Literary sources appear to provide evidence for the use of the codex by the ancient Jewish sect of the Samaritans, possibly as early as the third or fourth century AD. The fact that some of their scripts have their roots in Egypt would lend itself to explaining the link-stitch sewing, described by Crown (1987), on a series of extant Samaritan codices, dating from the thirteenth century at the earliest. They show signs of intensive use and of many old and new repairs, yet allow us to establish that, since they present features of Coptic and Byzantine codices, they conform to the Mediterranean binding tradition.<sup>7</sup> However, they represent such a small and perhaps hardly representative sample that the chapter on the early Jewish codex cannot yet be written.

## NOTES

1. The suggestion that these objects represent ancient codex structures was first made by von Repperteur (1956a), see also Szirmai (1990a). Others, like Skelton (1969 p. 90) and Roberts and Skeel (1987 p. 11), interpreted them as scrolls or very thick folios.
2. Calculated from the data of Roberts and Skeel (1987 pp. 37–44), in their chapter 9 possible reasons for the Copticians’ preference for the codex are discussed in detail and the Turner (1968), Skelton (1969), McGovern (1985) and von Haack (1989).
3. Further on this early writing tablets see Turner (1967: 1572), Skelton (1969: 1996) and Brown (1964); a review of the material aspects is given by Hill (1983).
4. Relevant remarks on the classical period are given by Berggren (1932), Pöhl’s response to Roberts and Skeel (1988) and von Haack (1989).
5. In its heyday between AD 700 and 1000 the Nestorian Church extended from Syria to China and must have had millions of adherents. With the persecution and subsequent annihilation of these communities the vast majority of their scriptures was destroyed. A unique Nestorian codex dated AD 892 is a miniature of an ill-ordered book by Dixinger (1953 pp. 265–301); it was written by a missionary returning from China and found after his death in his cave in the Hakkai Mountains (Kandjia), where a few small surviving manuscripts of Nestorians still live in isolation (Chevalier 1985).
6. The Manichaean scribes continued with great care in writing and illuminating manuscripts and solidly maintaining their bindings (Dixinger 1953 pp. 341–44). Subsequent persecution by the Christian Church and Islam led to the loss of what once had been a high standard of bookmaking. A few of their manuscripts with fragments of

decorated book covers have been found in T'ho-Gia (Turkistan) early this century; they are ascribed to the eighth or ninth century (Lo-Cing 1977 pl. 17; Leach 1956 fig. 106; Kieker 1937 fig. 50).

6. The earliest report of Samaritan endbands appeared in an article by the New York traveller, Mary Ellen Rogers, in 1868, her illustrations were reproduced by an anonymous reviewer in *The British Bookman* in 1890. Paul Anton had proposed to include this drawing in his unfinished manuscript of his *Geschichte der Endbandkunst* ca. 1931. Apart from the Düsseldorf (Kunstgeschichte), he included the thin wooden plates, which were sewn onto the head and tail of the spine, as well as a diagram to strengthen the different barbed k and concluded its flat shape. His suggestions that the wooden plates are part of the bookblock's sewing (Göteborg 1874) or of the endband structure (Caouin 1987) are unlikely. I owe thanks to Fred Shikadeh, who examined for me the Samaritan manuscript Philadelphia Haverford College MS 72 and confirmed the settings of an endband of colored thread are independent of the wooden plate, and to Ronald C. Mahlema for tracking down the reference of Rogers' article.

# Chapter 1 The first single-quire Coptic codices

## 1.1 INTRODUCTION

Although leaves or fragments of leaves of the earliest codices can be traced back to the second century AD, the first surviving binding structures seem to date only from the third/fourth century AD. The best known examples are the Gnostic manuscripts found in 1945, buried in a jar near the Egyptian village of Nag Hammadi, close to the ancient monastery of Chenoboskion, and comprising 13 papyrus codices (all but one of the single-quire type) still in their original leather binding. The important find was announced by Jean Doreese and Jogo Mina in 1949 but despite the considerable attention they have received since then, a whole decade passed before they were made accessible to scholars, and another two before the results were finally published; a true odyssey indicating more damage to the objects than had the ravages of time. For the history of the find see Robinson (1984 pp. 3–14; 1991).

The first publication by Doreese and Mina (1949) contained only a photograph of the bindings (Figure 1.1) and the plain statement that the volumes 'conservent leur reliure de cuir en excellent état'. Van Regermorter (1955; 1960) was allowed to examine five bindings, evidently under very hasty conditions; her report is deficient and has been superseded by a later and concise article by Doreese (1961) presenting his first original sketches and photographs. Unfortunately, Doreese's hope that soon '*une étude précise de leurs reliures pourrait être entreprise par quelque spécialiste plus compétent que nous-mêmes*' (p. 27) as well as his fears that, with all that delay, he '*se trouvera vraisemblablement plus dévasté lui que les codices eux-mêmes sans que les observations techniques indispensables aient été faites en leur temps*' (p. 30) became true. From the description of the bindings by Robinson in the *Facsimile Edition of the Nag Hammadi Codices* (1972–7) it appears that some parts had already been lost by then or were no longer in their original state; as the bindings had been dismantled without thorough documentation, some aspects could not be examined.

## 1.2 THE COVERS OF THE NAG HAMMADI CODICES

The bindings of the Nag Hammadi codices are apparently very simple, but due to the above circumstances some details remain obscure. Their construction (Figure 1.2) is described on the basis of the information given in the *Facsimile Edition* (1972–7) and in two summaries by Robinson (1974; 1981 pp. 71–86);<sup>1</sup> further particulars are also found in Krause and Lattin (1962), Krause (1975), Ogden (1989) and Muskatil (1993).<sup>2</sup>



Figure 1.1 The Nag Hammadi codices in their original state shortly after their discovery in 1945 (from Doresse and Mina, 1946)

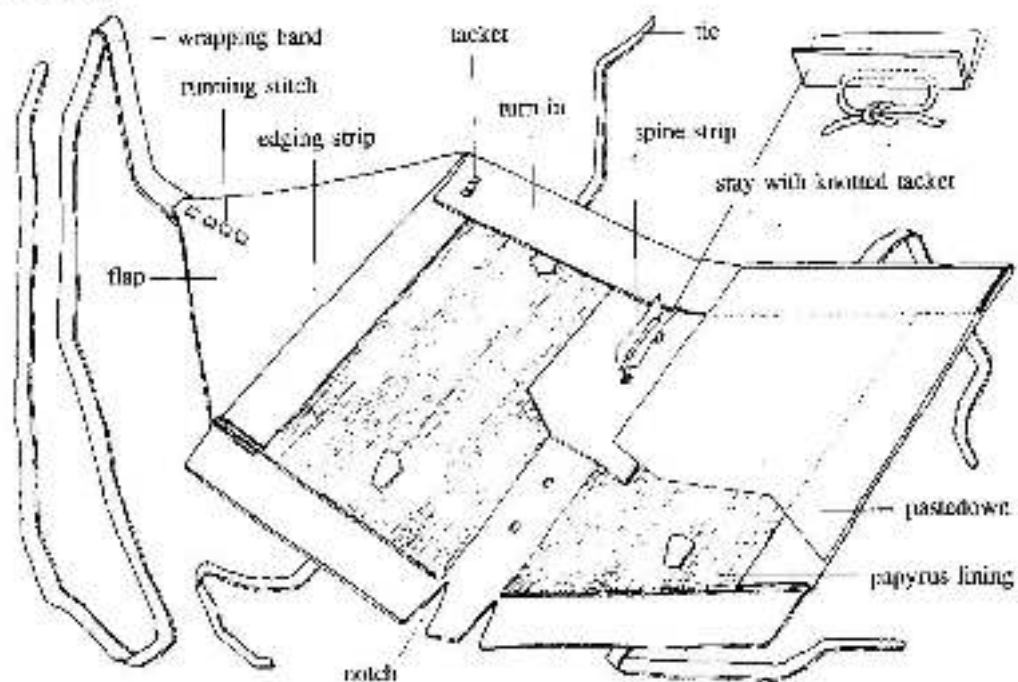


Figure 1.2 Diagram of the construction of the Nag Hammadi codices

The basic principle of the Nag Hammadi binding is that of a limp leather covering, stiffened to a varying degree by a lining of reusad papyrus, joined with the spine by two leather tackets passing through the coverfold. In most cases the front edge of the upper cover extends to a flap,<sup>1</sup> to which a wrapping band of leather is attached; additionally, pairs of leather ties at the head and tail of either cover are applied to keep the book closed. A whole hide (goat- or sheepskin)<sup>2</sup> was required to cover the codices (height 240 to 290 mm, width 120 to 180 mm), the neck portion often being utilized for the envelope flap. In some cases (Codices V, VII, IX and XI)<sup>3</sup> the covering is composed of several pieces, their slightly overlapping edges joined together by a running stitch with facing. The skin has been cut large enough to allow for turn-ins of 20 to 40 mm; on bindings with an envelope flap an extra edging strip of leather is provided.

The envelope flap is of triangular (Codices II, III, V, VII and XI) or rectangular (Codices VI, IX and X) shape; Codices IV and VIII have no such flap and the front edge of the upper cover is turned in as usual. The edges of the leather are neatly cut; the turn-ins are fully overlapping at the corners, the head and tail turn-ins being on the top in Codices IV, VII and VIII, the front turn-in on the top in Codices II, III, V, VI, IX and X. However, these data should be treated with reservations: since the papyrus lining was removed from all the covers, the original position of the turn-ins has become uncertain. The head and tail turn-ins of Codices IV, V and VIII extend over the spine area; in the others, notches have been cut into the turn-ins at the spine area, hence allowing for freer movement of the covers (see Figure 1.2). The turn-ins seem to have been pasted down; in some cases (Codices II, IV, IX and X) they are further secured with tiny tackets of leather, with single knots on the inner face of the covers.

A wrapping band of leather is fastened to the envelope flap with a tacket or a running stitch, sometimes employing decorative reinforcement with patches of leather (Codices III and VII). Most of the wrapping bands are broken or incomplete, but those which could be reconstructed measured 540, 580, 715 and 1030 mm (Codices IX, VI, VII and IV respectively, the latter consisting of two pieces). Leather ties are affixed to the head and tail of both covers; in most cases the ties are threaded through a slit in the cover and their slightly widened ends pasted down onto the already lined inner face of the cover. In Codex II the ties are secured by a short leather strip going across their base; Codex III seems to have a self-anchoring attachment through three slits, similar to the attachment of leather ties on late medieval European limp bindings (see Figure 10.27). Codex XI has neither ties nor a wrapping band. While the covers of Codices IV, V and VIII are decorated with blind-tooled lines, Codex II is tooled more elaborately with ornamental figures between the lines, possibly inked or coloured.

All covers (except for those of Codex II) have a papyrus lining of an unspecified number of used leaves (but blank in Codex VI), in most cases carrying Coptic or Greek texts which provide evidence for dating the bindings to the second half of the fourth century AD (Harris 1975). In some cases (Codices IV, V and VIII) the lining extends over both covers and the back; in Codices VI, IX and X the upper and lower covers are lined individually, thus leaving the back unlined. In most cases (except for Codices II and XI) there is usually a protruding strip of leather on the spine (for a definition of the terms 'back' and

spine' (see Chapter 2, note 3). The height of these leather spine strips equals the height of the covers, their overall width ranging from 40 to 110 mm. Their extensions are pasted down either directly on the inner face of the leather covering or on the papyrus lining, occasionally sandwiched in-between papyrus layers; on the inner face of the covering the turn-ins are folded over the extensions of the spine strips. Codices IX and X have, in addition, leather strips taken across the spine strip and covered by the turn-ins at the head and tail. Usually black papyrus leaves are pasted down on the inner face of the covers and over the turn-ins. In some cases the first and last leaves of the quire remain unscripted, possibly meant as flyleaves.

### 1.3 COVER ATTACHMENT

Quire and cover were connected by means of two leather tacks: rolled leather thongs, traversing the quire in the centrefold through a pair of holes c. 20 to 45 mm apart.<sup>6</sup> In Codex II 'vestiges of flax string survive' (Robinson 1975 p. 180). Stays (short inner guards) of pieces of leather were placed inside the centrefold to prevent the leaves from tearing (found still *in situ* in Codices IV, V, VI and IX). The tacks passed through the back covering and were knotted either on the back, as in Codices II, VI, IX, and X, or inside the centrefold, as in Codices IV, V and VII (Figure 1.3 [a]). Since in Codices III and VI there are no holes visible in the back of the covering, it is evident that the spine strip was first attached to the quire and then pasted down onto the inner face of the covering. Obviously this method was used on Codex III, as the knotted ends of the tacks have been found to be between the spine strip and the covering (Figure 1.3 [b]). This method of attachment is more sophisticated: it is perhaps less strong, but aesthetically more pleasing, as the tacks are not visible on the back. For Codex VII this cannot be verified likewise, since the spine strip has not survived and no details of the attachment been recorded.

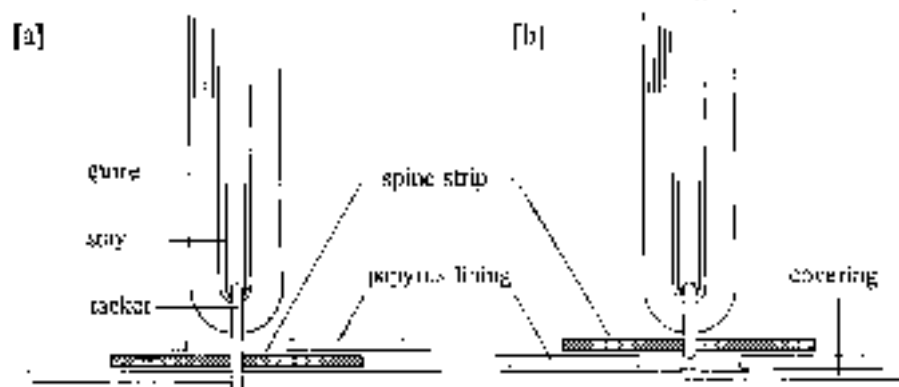


Figure 1.3 Two methods of cover attachment observed on the Nag Hammadi codices: [a] direct attachment with the tackler passing through the whole of the cover; [b] attachment mediated through the spine strip, the tackler passing through the spine strip only and remaining hidden under the covering.

#### 1.4 TYPOLOGY OF THE NAG HAMMADI CODICES

On the basis of different traits in the technical details of the bindings Drexler (1961, p. 49), Krause (1975) and Robinson (1975 pp. 181–90; 1984 pp. 79–86) have attempted to classify the codices into groups. The codices of one group (Codices IV, V and VIII) have a one-piece papyrus lining and no notches in the turning of the back, with a resulting marked stiffness of the binding. The tackets attaching the quire to the cover are knotted in the centre-hole. The wrapping band consists of two pieces of thong (in Codex VIII the second part is lost); the leather ties at the head and tail are threaded through the covers and their widened ends pasted down on their inner face. The covering is of a dark brown-grey colour (mold with simple blind lines; only Codex V has an envelope flap). These three codices are the shortest (heights 237, 245 and 242 mm) and the papyrus of the text is relatively coarse.

The second group comprises Codices VI, IX, X and possibly II. Their main features are a rectangular envelope flap, no papyrus lining on the back and the presence of two horizontal strips of leather between the entering and spine strip in the area of tacketing; the turn-ins are held down by minute tackets with the knots on the inner face of the covers. The tackets connecting the quire to the cover are tied on the back in the case of Codices VI, IX and X. The covering is of a golden tan colour and has no decoration (except for Codex II which is the most ornate one). The papyrus is much finer than that of the previous group.

According to the above authors the remaining Nag Hammadi codices do not share enough common traits to establish another group. Yet Codices III and VII could be grouped together on account of their distinct cover attachment, which, as described above and shown in Figure 1.3 (b), depends solely on adhesive, for the tackets are not passed through the covering. Here, the spine strip plays the role of the flanges, encountered on many types of multi-quire bindings (see Chapter 5, note 9). The two covers with the back are comparable to a separately made 'case', fixed to the backblock with adhesive.

#### 1.5 OTHER SINGLE-QUIRE CODICES

The Nag Hammadi codices have received considerable attention, although they constitute only a comparatively small proportion of all extant single-quire codices: Turner (1977 pp. 58–60) lists about 45 further examples, 60 per cent of them belonging to the fourth century, 30 per cent to the third century. They all originate from finds in Middle and Upper Egypt and contain literary or other Greek texts and Christian texts in Coptic or Greek. Unfortunately there is little information about their binding structures; the first owners had the codices taken apart and their leaves mounted between glass plates. Seldom has any attention been paid to a binding unless it was decorated, and only rarely have structural details been recorded.

An example of the lack of interest in binding structures is the fate of the Gnostic manuscript P. Berol. 8502, unearthed in pristine condition: '*Das Manuskript lag noch in dem Originaldeckel aus Leder und Papyrus, wie überhaupt das Ganze in einem unveränderten Zustande*

*gefunden von wesen?* (Schmidt 1896 p. 339). The codex was dismantled and its binding forgotten (Illustrated without identification by Adam 1823 4 p. 98). A search initiated by James M. Robinson led to its rediscovery and publication by Krusch and Postae (1984). According to the latter, the detached covers are from an earlier blind-tooled leather codex; their description and notably their photographs indicate that the quire was attached to the covers by means of method [b] in Figure 1.3.

A similar single-quire Coptic codex (Berlin SUB MS or. oct. 987) was dismantled and its contents mounted between glass by Ischaer in the late 1910s. Again no details of the binding structure were recorded, except for mentioning a parchment stay and remains of a hempen [?] cord, the lining of the covering with six to eight leaves of reused papyrus, four pairs of leather ties (two at the front edge, one each at the head and tail) and simple blind tooling with triple lines (Ischaer 1920).<sup>7</sup> With reference to one of the codices of the Dublin Chester Beatty Library (unspecified), Ischaer (1937 p. 13) suggested an alternative method of forming a stiff cover by pasting together a number of the uninscribed outer leaves of either side of the quire; this pasteboard formed *in situ* would then be covered with leather.

The Crosby-Scheyen Codex (Schøyen Collection, Oslo and London; see Willis 1961, (Buchling 1999), one of the smallest single-quire codices (146 × 153 mm), originally consisted of 65 leaves. When it surfaced in 1955, it still contained a 'narrow buck strap of leather [...] which anchored the thick cord with which the quire was sewn; the cord, still present there, secured the leaves "with a single vertical lout"' (Willis 1961 p. 387).

## 1.6 THE BOOKBLOCK

All single-quire codices are written on papyrus and can consist of a considerable number of sheets: Turner (1977 pp. 58–60) cites Milan BA MS P, Voghera V of 70 sheets (140 leaves) as one of the most bulky examples; the Nag Hammadi Codices II, III, VII and VIII with 148, 152, 132 and 140 pages respectively are of medium size, while the Leiden RMO Papyri X and W with 40 and 32 pages respectively being examples of smaller ones. In the case of Berlin SBB MS or. oct. 987 Ischaer showed that its 40 sheets had been serially cut from two papyrus rolls of 2140 and 2220 mm. This has been confirmed in many other cases and seems to have been an established practice in a period when papyrus rolls were in general use (Ischaer 1920 p. 38; see also Turner 1977 p. 41).

When a large number of sheets is folded the inner leaves will markedly protrude at the fore-edge. Actual evidence shows that the fore edge must have been trimmed, since the central leaves are considerably narrower. For the Nag Hammadi codices, Marshall (1993) noted differences in width between the outer and inner leaves of c. 20 mm (ranging from 6 to 30 mm). The outer leaves of the P66L find have a width of 140 mm, the inner leaves only of 125 mm; the corresponding values of Berlin P. Berl. 8902 are 155 and 130 mm; the difference in the case of the Dublin Chester Beatty Library Bibl. Pap. II is about 30 mm (Turner 1977 p. 23).

This seems to have been one of the number-one aspects of the single-quire codex: the scribe had to adjust the width of the written column according to the available space at



- [Deeper Than That book](#)
- [read Hack This: 24 Incredible Hackerspace Projects from the DIY Movement.pdf, azw \(kindle\)](#)
- **[La pasión según G. H. \(Biblioteca Clarice Lispector\) book](#)**
- [read online A Bat in the Belfry \(Home Repair is Homicide, Book 16\)](#)
- [The Innocent Anthropologist: Notes from a Mud Hut \(The Innocent Anthropologist, Book 1\) online](#)
- [read online The Gospel of Thomas: The Gnostic Wisdom of Jesus](#)
  
- <http://honoreavalmusic.com/?books/Flag-in-Exile--Honor-Harrington--Book-5-.pdf>
- <http://serazard.com/lib/Hack-This--24-Incredible-Hackerspace-Projects-from-the-DIY-Movement.pdf>
- <http://crackingscience.org/?library/Second-Variety--Short-Story.pdf>
- <http://sidenoter.com/?ebooks/The-Art-of-the-Matrix--Newmarket-Pictorial-Moviebook-.pdf>
- <http://thewun.org/?library/Emerald-Eyes.pdf>
- <http://sidenoter.com/?ebooks/The-Gospel-of-Thomas--The-Gnostic-Wisdom-of-Jesus.pdf>