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The Islamic Bookbinding Tradition. A Book Archaeological Study

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The Islamic Bookbinding Tradition

A Book Archaeological Study

The Islamic Bookbinding Tradition
Karin Scheper

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The Islamic Bookbinding Tradition

A Book Archaeological Study

PROEFSCHRIFT

ter verkrijging van
de graad van Doctor aan de Universiteit Leiden,
op gezag van de Rector Magnificus prof. mr. C.J.J.M. Stolker,
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One who seeks this art should have quick understanding, good observation, dexterity of the hand, and be certain without being hasty. The latter is a good manner of getting along and it has the elegance of attracting others of grace and good character.

Tamim Ibn al-Muizz Ibn Badis, ca. 1025 CE

'Twelfth chapter on the art of binding books in leather and the use of all its tools until it is finished by the bookbinder', in: *Mediaeval Arabic bookmaking and its relation to early chemistry and pharmacology*, translated by Martin Levey (1962), p. 42.

The intelligent ones will understand this with simple directions. For others loud shouting will be necessary. Another group will need cursing but not the stick. A stick will be necessary for the last group.

Ahmad Ibn Muhammad al-Sufyani, 1619 CE

'Art of bookbinding and of gilding', in: *Mediaeval Arabic bookmaking and its relation to early chemistry and pharmacology*, translated by Martin Levey (1962), p. 5.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	vii
INTRODUCTION	1
Books as material culture	1
The technique of Islamic bookbinding	1
A biased opinion	2
Understanding in order to preserve	2
A codicological framework	3
Physical examination of the Leiden collections	4
The context	5
The anatomy of the Islamic codex	5
Comparative study of the literature	6
Surveying the collections	7
Terminology	7
Part One MATERIALITY MATTERS	9
A detailed sketch of the current state of knowledge and outline of the research	
1. The information value of binding structures	9
1.1. General observations	9
1.2. Recent developments in Western book history	10
1.3. Book archaeology and digitisation	12
1.4. Preservation issues	13
2. Present situation of the book archaeology of Islamic manuscripts	14
2.1. Disadvantages in developments	14
2.2. The position of book archaeology and the consequences for preservation	14
3. Obstacles in the study of Islamic book making	16
3.1. Decoration	16
3.2. Ink	18
3.3. Paper	18
3.4. Textblock	20
4. Linking physical analysis, catalogue data and literature	20
4.1. Brief outline of the primary and secondary literature	20
4.2. The predominant Islamic manuscript type	22
4.3. The need for a typology	23
4.4. Point of departure for the survey	24
5. Selection and justification of the corpus	24
5.1. The Islamic collections in Leiden	24
5.2. Criteria for selecting bindings	26
5.3. Possibilities and restrictions	29
Part Two THE ANATOMY OF THE ISLAMIC MANUSCRIPT	31
A detailed overview of the different methods of construction	
1. Vocabulary and images as tools	31
1.1. Terminology	31
1.2. Illustrations	35

2.	Techniques used to construct the textblock	35
2.1.	Link-stitch sewing	35
2.2.	Stabbed sewing	41
2.3.	Sewing on supports	43
2.4.	The primary endband sewing	43
2.5.	The dual function of the spine-lining	45
2.6.	Unsewn manuscripts with wrapper bindings	49
3.	Covering and board attachment	51
3.1.	Full leather bindings and the use of the two-pieces technique	51
3.2.	'Built-on' bindings	53
3.3.	Tabbed spines	55
3.4.	Tabbed partial leather bindings	56
3.5.	Tabbed 'two-pieces'	57
3.6.	Indeterminate structure	58
4.	A problematic term: Case-binding	58
4.1.	A matter of definition	58
4.2.	Counter-evidence in the structure	59
4.3.	The dual function of the spine-lining	59
4.4.	Misjudgement caused by a Western perspective	60
4.5.	The impact of a leading opinion	62
5.	Other characteristics	63
5.1.	Boards	63
5.2.	The fore-edge flap	63
5.3.	The envelope flap	65
5.4.	Decorative structural elements	66
5.5.	Page-markers	69
5.6.	Characteristically tabbed spines	71
5.7.	Endband characteristics	71
6.	Meaning and validity of the diversity	73
Part Three COMPARATIVE STUDY OF THE HISTORIC SOURCES AND RECENT LITERATURE ON THE MAKING OF ISLAMIC MANUSCRIPTS		77
1.	Historic sources	77
1.1.	Introductory remarks	77
1.2.	Ibn Badis	78
1.3.	Bakr al-Ishbili	81
1.4.	Al-Malik Al-Muzaffar	85
1.5.	Ibn Abi Hamidah	87
1.6.	Al-Sufyani	88
1.7.	Concluding observations	91
2.	Secondary sources: related studies and general reference works	93
2.1.	Book historians, art-historians and pioneers of manuscript studies	93
2.2.	Glossaries and encyclopaedias	95
3.	Founders of our knowledge of the use of structure and materials in Islamic bookmaking	97
3.1.	Bosch	97
3.2.	Déroche	101
3.3.	Gacek	102
4.	Structure as a starting point	104
4.1.	Szirmai	104
4.2.	Merian	105

4.3.	Fischer	107
4.4.	Espejo and Beny	107
5.	Structure as a side issue	108
5.1.	Raby and Tanındı	108
5.2.	Haldane	109
5.3.	Porter	111
5.4.	Gruber	112
5.5.	Miller	112
5.6.	D'Ottone	113
5.7.	An assortment of (mis)perceptions	114
6.	Structure as a conservation issue	115
6.1.	The eighties and nineties of the twentieth century	115
6.2.	The first decade of the twenty-first century	117
6.3.	Model making practice	119
7.	The sum of the parts	121
Part Four	MULTIPLICITY WITHIN THE TRADITION	123
	Account of the methodology and quantitative results of the survey	
1.	Methodology	123
1.1.	General procedure	123
1.2.	Explanation of the database and form design	124
1.3.	The Malay collection	129
1.4.	Excluded textblock features	130
1.5.	Exclusion of binding decoration	132
1.6.	Excluded binding features	133
1.7.	Excluded categories	135
1.8.	Considerations regarding the degree of validity of the findings	136
2.	Survey results – quantitative analysis	137
2.1.	Datable and localisable manuscripts	137
2.2.	Sewing	138
2.3.	Spine-lining	139
2.4.	Endbands	140
2.5.	Covering	141
2.6.	Treatment of the spine at head and tail	146
2.7.	Fore-edge and envelope flap	147
2.8.	Inner joints	147
2.9.	Doublures and endleaves	147
2.10.	Bindings without paste-paper boards	149
2.11.	Oblong bindings, page-markers and other phenomena	149
2.12.	In conclusion	150
Part Five	MAPPING THE VARIATIONS IN TIME AND PLACE	151
	Datable and localisable features and a further interpretation of the findings	
1.	Sewing	151
1.1.	The ratio of the different sewing structures	151
1.2.	The traditional link-stitch sewing with sewn-on leather doublures	153
1.3.	Traditional link-stitch sewing on more than two stations	155
1.4.	A diverging link-stitch sewing on three or more stations	158
1.5.	Sewing on supports	160

1.6.	Stabbed sewings	160
1.7.	Tackets	161
1.8.	Unsewn manuscripts	161
2.	Spine-lining	163
2.1.	Material	163
2.2.	Function	164
3.	Endbanding	165
3.1.	Patterns	165
3.2.	Tiedowns	168
3.3.	Endband cores	168
3.4.	The saw-cut endband	169
3.5.	Absence of endbands	169
4.	Covering	170
4.1.	Full and partial leather	170
4.2.	Full leather bindings in one and two pieces	171
4.3.	Composite leather bindings	173
4.4.	Limp leather bindings	177
4.5.	Partial leather bindings: the çaharkuşe binding	180
4.6.	Partial leather bindings: lacquer bindings	181
4.7.	Partial leather bindings: the paper binding	182
4.8.	Relation to content	184
4.9.	Boards	184
5.	Spine-endings	185
5.1.	Tabbed spines	185
5.2.	Cut flush with the textblock	185
5.3.	Turned-in spine-ends	186
6.	Interior covering of the boards	186
6.1.	Doublures	186
6.2.	Endleaf structures	187
6.3.	Inner joints	189
6.4.	The lining of the fore-edge flap	189
7.	The envelope and fore-edge flap	190
8.	Miscellaneous features	191
8.1.	Decorated paper	191
8.2.	Page-markers	194
8.3.	Size and format	195
9.	Southeast Asia as a sub-category in the Islamic tradition	196
10.	Summary	198
Part Six CONSIDERATIONS AND NEW PERSPECTIVES		201
1.	Recapitulation	201
2.	Development of the tradition	202
2.1.	The archetypal Islamic manuscript structure and binding	202
2.2.	A varied repertoire	203
2.3.	Transmission of techniques and methods	203
2.4.	The complex nineteenth century	205
2.5.	The transition to printed books	206
2.6.	A profile of the repairs	209
3.	Discussion	210
3.1.	The perception of Islamic bookmaking from a Western perspective	210
3.2.	Observation and experimentation	211

3.3.	The impracticability or drawbacks of a typology	212
3.4.	Further study	214
4.	Conclusion	216
4.1.	An adjusted identity	216
4.2.	Implications for conservators	217
BIBLIOGRAPHY		219
APPENDICES		229
I.	Glossary	229
II.	Corpus	239
III.	Example of a record of the database	245
IV.	List of manuscripts used in illustrations	247
SAMENVATTING		249
CURRICULUM VITAE		253

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Being trained as a conservator of Western manuscripts and printed works, I knew nothing of Islamic manuscripts when I started the conservation workshop in the Leiden University Library (UBL) in 2000. The Oriental manuscripts required my attention nevertheless. A condition-assessment of part of the collection helped to get acquainted with these objects, with their physical particularities and their preservation needs in general. When one works with old books, the senses are always involved. Books have a scent, which tells us something about the materials they are made of and the circumstances they have been kept in. They can be visually attractive, interesting or rather dull, and they emit sounds too; creaks may caution the user for vulnerable joints and leafing through parchment or paper textblocks will produce subtle sound differences. But above all, these objects with their composite materials have a special touch. For me, tactility has been the most intriguing aspect of the Arabic manuscripts in the Oriental Collection; they are so very different from Western books. The Islamic paper of the older volumes is soft, sometimes almost cloth-like. The rounded corners of textblocks bear witness of intense use; these books were carried around and pocketed and thumbed a lot. The covers, flush with the edges of the textblock, with boards not made of wood or other heavy material but consisting of laminated paper leaves, are light and sometimes even a little limp, and thus they form a unity with the textblock in a surprising way. The leather, used to cover the bindings, is quite different from the leather used on Western bindings as well. Perhaps the most typical feature of these bindings, the envelope flap which closes around the fore-edge of the textblock and is put underneath the front cover, is a protective element which is very sympathetic with the manuscript; these artefacts have no metal clasps and accompanying nails that leave small holes or corrosion marks in the outer leaves. The use of silk for the decorative endband sewing adds to the attractiveness of the volumes. On the whole, the books are easy to touch and accessible, even the ones affected by old age or the heavily repaired ones – perhaps those especially. Notwithstanding the (for me) inaccessibility of the Arabic writings, I felt a strong affinity with the materials and shape of these manuscripts.

The manner in which *real* books – as opposed to their digital equivalents – appeal strongly to our senses is instrumental to one of the most important effects old books have on us when we work with them: we get a sense of being in touch with the past. It is through their materiality and the physical characteristics, that books speak to us beyond their intellectual content. The book as a physical object is an information carrier, provided that one knows how to interpret the message. In the case of the Arabic manuscript collection in the UBL it was clear that there were an abundance of messages, but a framework to interpret the information was lacking; though Islamic bindings had been studied for art-historical developments, the technique of their making and structural composition had been largely ignored. Because of my professional need for a better understanding of these objects – in order to be able to make conservation decisions – and my interest for Islamic manuscripts as artefacts, I decided to use the collection itself to learn about the technique of Islamic bookbinding. Conducting the actual survey was like excavating and mining the stacks; it was a privilege to be able to do that.

Many people helped to get the work on its way or see it getting done. I much appreciate the enjoyable discussions I had with colleagues and friends, either close by or far away, among whom are Gabriëlle Beentjes, Femke Prinsen, Wineke Meeuws, Mandana Barkeshli, Annabel Teh Gallop, Amélie Couvrat Desvergues, Kathryn Schwarz, Meredith Quinn, Herre de Vries and Luitgard Mols. My thanks also go to Evyn Kropf, Teresa Espejo Arias, Marie-Geneviève Guesdon, Adam Gacek, Jan Just Witkam, Jake Benson, and Joachim Meyer, who responded to my questions so graciously. I thank Laura Parodi, Neill McManus for sharing some of his findings, and all others who I met through TIMA and COMSt projects; often the conversations we had helped to shape my ideas.

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granted me unlimited access to the stacks which is a gift in itself, and the two collection curators, Marie-Odette Scalliet and Arnoud Vrolijk, provided counsel, enthusiasm and knowledge. In addition, I would like to thank LUCAS, for the support that enabled me to take a two-months leave in the final stage of my writing, which proved to be very productive as it allowed me to fully focus. My conservation colleagues who work with me in the workshop offered practical backing and stimulated my study further by showing genuine interest and asking many questions. In addition, I am deeply indebted to Femke Prinsen, for her amazing computer skills and her readiness to help.

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INTRODUCTION

Books as material culture

Although the manuscript in codex form originated in the Middle East, the study of the Islamic manuscript as a physical object has its foundations in the Western world. The field of book history covers the making, dissemination and reception of books, and the development of scripts and printing. Within this field, the study of the technical and material aspects of bookbinding constitutes a separate part. As decorative objects, bindings have been studied since the nineteenth century. It was, however, only in the second half of the twentieth century that the history of the technique of bookbinding developed as a discipline in its own right. Instead of focussing on the higher end of the book trade, which was inherent to the art historical approach, it widened its scope to include the whole spectrum of book production, and, in addition, the construction of books became a topic of interest. The general focus, however, was on the development of the Western book.

Modestly bound, even plain books came to be recognised as objects of importance since they represent a large part of the total of book production. Economic motives have always been an important factor in the book trade, and all levels of the binding trade are of significance when studying the means of economising. By the same token, the use of materials, the binding's structure and particular marks of craftsmanship came to be valued as informants on the book's history. Instrumental for the growing awareness of this aspect of the history of the book is the development and establishment of a related field of expertise: book conservation. Since book conservators have access to parts of the structure that remain concealed to others, their contribution to the knowledge of the physical book has been crucial. Over the last decades the exchange of information between scholars and conservators has much intensified and has encouraged discussion between these specialists, stimulating and contributing to the study of the physical aspects of books.

The awareness and recognition that a manuscript or printed book also carries information beyond its text is relatively new, and it has added an interesting dimension to the study of books. The study of the materiality and technical aspects of a book is also known as book archaeology. The construction and the materials used to make the artefact can reveal valuable data about the historical and social context of a particular text and the book as an object. Through examination of the physical book, information may come to light that could not have been found in another way, for example on the item's provenance. In other cases, material evidence may corroborate with clues already found through different methods, thus supporting theories that otherwise could have remained inconclusive.

The idea that a book is not just a text-carrier but a material informant as well, is nowadays acknowledged by many scholars involved in the study of manuscripts and printed books, both Western and Oriental. However, contrary to the field of Western book archaeology, the technical study of Islamic manuscripts is still in its initial phase. Research in the field of Islamic manuscripts also gradually widened its scope from philological and palaeographical studies to contributions concerning the design and ornamentation of calligraphy and bindings. As with the Western bookbinding tradition, the interest in the materials and techniques, applied to produce the artefacts, arose at a later stage. It is this aspect of Islamic manuscripts with which present study is concerned.

The technique of Islamic bookbinding

It is customary to use the term 'Islamic' for objects of art and artefacts produced in the Islamic world which are made by or for Muslim peoples, whether the items themselves function in a religious, socio-cultural or political context. The term thus indicates a clear cultural origin, and that is what the words 'Islamic manuscript' signify in this study. The book arts have always held a prominent position in Islamic culture throughout territories, which links the manuscript tradition to a vast geographic area and a wide timeframe, in which diverse ethnic

groups adopted Islam. For that reason alone one may safely assume that there are several quite distinctive local traditions.

While it is perfectly clear to most people, also non-experts, that the material form of the Western codex is characterised by diversity, it is often thought that in Islamic bookbinding such variety cannot be found and that the Islamic bookbinding tradition is more conservative, if not static. It is true that many Islamic manuscripts share visual characteristics and binding features, and there certainly is a predominant outward appearance. However, the assumption that the bulk of these manuscripts were made according to a uniform procedure, does not suffice. There are simply too many variations, and anomalies, to justify such a conclusion. In order to gain a better understanding of the breadth of the Islamic manuscript tradition, and more specifically the heterogeneity in the technique of Islamic bookbinding, the construction of these artefacts needs to be observed and analysed more closely.

A biased opinion

Another misperception is the supposed weakness of the Islamic codex. Again, when a comparison with 'the Western book' is made, the Islamic binding structure is deemed to be inferior. Not only does the comparison fall short, as there is no such thing as *the* Western book structure; more importantly, the composite structure of the predominant Islamic book is often misunderstood. Its binding is commonly described to be a *case-binding*, which implies that the binding was made separately from the textblock, and was only attached to it by means of adhesive on the spine. Additionally, the unsupported link-stitch sewing on two sewing stations, which was common for the Islamic textblock production, is generally judged to be an inferior sewing method. This overall depreciative image of the Islamic bookbinding tradition has caused the rebinding of many volumes, and has also resulted in a range of misjudgements when it comes to conservation treatment. With the best intentions, the faulty interpretation may lead to alterations and 'improvements' that interfere with the original artefact, and are often harmful to its functioning.

Working with the Oriental Collections in the Leiden University Library (UBL) and examining objects before and during treatment, it appeared to me that many Islamic manuscripts refuted these general assumptions. The dominant link-stitch sewing appeared to be part of a composite structure, involving a method of lining and endband application which together resulted in a functional and durable construction. In addition, though a consistent, archetypal binding format could be defined, I observed a variety of original sewing methods. Moreover, the characterisation of the Islamic binding as a case-binding was contradicted by many volumes. These observations prompted the comprehensive assessment and technical analysis of all of Leiden's Islamic manuscripts.

Understanding in order to preserve

The importance of recognising the diversities within the tradition is two-fold. A better understanding of the developments in the bookbinding practice and the diffusion of the methods used supports other studies in the field of Islamic manuscripts or Islamic culture in general. However, we can only really learn and benefit from the material information a binding carries when the manuscripts are preserved in their original form. Needless to say, many manuscripts have already been resewn, rebound, repaired or ruthlessly restored. In the light of this loss, it is all the more important to safeguard those manuscripts still retaining their original structure and cover as best as possible. The responsibility for this falls within the domain of professional book conservators. They are the specialists who preserve these valuable objects with all their particular characteristics, provided that they are aware of these features and understand their importance. Therefore, one of the aims of this study is to serve the preservation and conservation of Islamic manuscripts. It does so directly, by informing conservation specialists about the multiplicity of structures and techniques one can

encounter when working with Islamic manuscripts, and indirectly, by creating an awareness that underpins the development of preservation strategies for this particular heritage.

Understanding the structure of a book is a prerequisite for any conservation treatment. When the material structure is poorly understood and decisions are based on assumptions, the impact of any intervention is a potential risk, and the damage to the material evidence could be irreversible. The book as an artefact should be considered as a container of archaeological material evidence. We cannot preserve such information embodied in an object if we do not know what that evidence looks like or what it is composed of. It is essential to recognise the type of structure and the materials used, and to be aware of their strength and vulnerabilities. Understanding the book structure as a composite artefact will also promote the development of treatment solutions. More specifically, it is hoped that increased knowledge about the Islamic bookbinding tradition will enhance the integrity of the Western conservation specialist with regard to the cultural importance of these manuscripts; it may help them to respect the structures belonging to these artefacts so that they are less inclined to impose Western structures on them.

To conservation professionals working in the Islamic world, this study may provide arguments to reevaluate their cultural heritage and reconsider some of the Western conservation techniques that were implemented in their practice. As most of the preservation guidelines were introduced from the West, the Western misperception of Islamic bookbinding has percolated their conservation approach. An increase of the knowledge of the manuscripts' materiality contributes to better-informed decision making regarding preservation. The preservation of Islamic manuscript collections may be further stimulated when the intrinsic value of the materiality of the artefacts is made known to the institutional bodies involved in setting out preservation policies and the allocation of budgets.

A codicological framework

Research into the materiality of manuscripts belongs to the field of codicology, the study of the codex's physical form. Codicology aims to provide information on the context in which a book is produced.¹ The analysis of materials and techniques used can shed light on the history of the period in and the circumstances under which a specific artefact is made. However, in order to be able to date and localise a manuscript with the aid of material characteristics, a reference framework should be available. Such a framework contains characteristics of textblock and binding elements, structural components, and the materials or techniques applied which are linked to a certain area or period. For the Islamic bookbinding tradition only part of the necessary knowledge on the characteristics is available. Studies on the decorative aspects, for example, have provided useful tools to classify certain manuscripts or bindings, but there are restrictions to the applicability of these art-historical features. They are, for example, mainly useful to classify the 'upmarket' part of the manuscript production; the bulk of the manuscripts were, however, not produced in court ateliers or a similar milieu, and for these volumes the stylistic and decorative quality offers fewer leads. Analytical techniques have made it possible to investigate paper fibres and ink components, adding

¹ A clear-cut definition is lacking; the *Oxford English Dictionary* offers "the study of manuscripts and their interrelationships" but nothing more specific. The European project COMSt (Comparative Oriental Manuscript Studies) states that: "Whilst codicology involves the study of the material and physical history of codices and, in more practical terms, the study of codex production in all relevant contexts, including attempts to identify scriptoria, modalities of circulation, economic aspects, etc., palaeography deals with the peculiarities of writing, its general development and dating, as well as the social aspects involved in the practice of writing". (COMSt brochure, 2009, http://www1.uni-hamburg.de/COMST/ESF_COMSt.pdf p.4, accessed 16-05-2014). This seems to confirm the general acceptance that codicology does include the study of written features such as marginalia and ownership inscriptions, the physical aspects of decoration and the study of the binding structure and binding materials.

essential information to the framework. However, the applicability of technological analysis is limited for several reasons, which will be further discussed in Part One. The art-historical and technological studies on the one hand and book archaeology on the other complement each other.

My position as a conservator allowed for the examination of the materiality, literally on the inside, since the structures of damaged books are often exposed. Thus, manuscripts in need of treatment invariably offered information. Secondly, the skills and expertise of a conservator enabled me to recognise former intervention treatments and to distinguish between Western and 'local' repairs. Finally, using similar materials and techniques as the original craftsman did, I have reconstructed the diverse structures I encountered. In that process of making book models, very much through trial and error, my insight in the materiality was actually defined. Retracing the actions of a bookbinder, closely following his steps and decisions, appeared to be the only way to verify certain parts from the historic sources on Islamic bookbinding, and to test my understanding of the exact procedures an original binder could or would have followed.

Physical examination of the Leiden collections

Without sufficiently detailed written documentation about the use of particular techniques and materials in certain periods or regions, information of the historic bookbinding practice can only be retrieved from the manuscripts themselves. We have to keep in mind, however, that bindings are not always directly related to the manuscripts they protect. Boards can be reused and manuscripts resewn. Therefore, an expert eye is needed to first establish if there are indications of rebinding or any other alterations made to the manuscript's structure or binding, that might diffuse the analysis. Unfortunately, Islamic bindings are hardly ever signed by their makers, although the colophon at the end of a text may reveal a date or place of completion. Those manuscripts that are dated can be informative with regard to binding traditions in a certain period; when their origin can also be verified specific techniques or materials can be mapped. It is important, however, to realise that such data can only function as a steppingstone: the binding may not have been applied directly or even in the same place. Therefore the results of such analysis should be presented with a certain caution, but the larger the corpus of systematically examined material with verifiable data, the more reliable the outcome will be. When a survey can be conducted on a large enough collection – with a wide enough range of manuscripts – it may become possible to define the dissemination and development of a bookbinding tradition over time. Given the expanse of the Islamic world and its long history, it necessitates the examination of a large number of manuscripts before such a framework can be built.

Four hundred years of Arabic studies at the University of Leiden have resulted in a rich and internationally well-known collection of c. 6000 Islamic manuscript volumes.² The oldest collections were assembled by the well-known scholar Josephus Justus Scaliger (1540-1609), who, although he never travelled in the Middle East, bequeathed an important collection of Oriental manuscripts to the University of Leiden, and Jacobus Golius (1596-1667), who travelled in the Maghreb and Levant himself. Levinus Warner (ca. 1618-1665), who worked and lived in Istanbul for twenty years, acquired around a thousand Arabic manuscripts on behalf of Leiden University. These early collections contained a wide variety of texts, such as treatises on mathematics, astronomy, medicine, geography, history, botany and literature, and some of these manuscripts were already hundreds of years old when they were acquired. With the arrival of Warner's manuscripts, three years after his death, Leiden became one of the most important centres in Europe for the study of Oriental texts.

² The history of Arabic studies and the subsequent growth of the Leiden Oriental collections is outlined by A. Vrolijk and R. van Leeuwen, *Arabic studies in the Netherlands* (2014).

In the following centuries, new acquisitions were added to the Oriental collections with varying frequency. Also, as the Islamic world expanded, the origin of the manuscripts can be retraced to a wider region. Although the majority of the manuscripts acquired originated from the heart of the Ottoman empire, peripheral regions such as Central Asia and the Balkans, and North and West Africa, are represented too, as well as the Arabian Peninsula, Persia, and the Indian Subcontinent. In addition, a substantial number of Islamic manuscripts produced in Southeast Asia reached the library.

The Leiden Oriental collections can be typified as a scholarly collection. Few manuscripts were collected because of their splendour and beauty, most volumes have been used: they were consulted, transported and annotated, and sometimes repaired or rebound, before they arrived in the Leiden collections. As a result, these items are physical witnesses of a variety of cultures and users, over several centuries. This signifies the importance of the Leiden Oriental collections as a valuable source for a book archaeological study.

The context

In Part One, the current state of learning with regard to the materiality of the Islamic book will be explored. It will demonstrate that our knowledge of Islamic binding structures is still in need of fundamental research. Some of the newly identified binding structures have been published in conservation journals, but none of these characteristics that are so important for our understanding of the technique of Islamic bookbinding are found in the standard reference books. As the secondary literature analysis in Part Three will show, a framework to actually locate and date bindings is lacking as yet. In some cases, there is a more or less limited idea of the origin of techniques used, based on findings that occurred during conservation or cataloguing projects; this sort of empirical understanding is important, but needs to be verified. A structured research specifically designed to examine physical aspects in relation to their origin has not yet been undertaken. It is hoped that the present research will fill part of that gap, and that it will provide at least some of the building blocks for the codicological framework. It will shed light on the developments in the manuscript production and diffusion of the techniques used, which are of interest to scholars in the field of codicology, provenance research, manuscript trade or the manufacturing of Islamic manuscripts in general. The results can be further used for the examination of manuscripts elsewhere, preserved in other collections, thereby enlarging the framework.

This research is also relevant for conservators working with Islamic manuscripts. It may help conservators trained in the Western tradition to step out of their usual reference frame (which is that of the history of Western bookbinding techniques), while conservators from an Islamic cultural background may be stimulated to recognise the distinctive aspects of the objects they are so familiar with. Regardless of the present location of the manuscripts, conservators need a sound knowledge of the manner in which the books were produced. Understanding of, and respect for, the manuscript's physical form is essential to ensure accurate documentation and a well-considered intervention treatment, the purpose of which should always be to preserve all information a manuscript has to offer.

The anatomy of the Islamic codex

The assessment involved the close observation of over a thousand original sewing structures and bindings, and provided information on Islamic bookbinding techniques and materials used during seven centuries and throughout the Islamic world. This generated many aspects of this manuscript culture, hitherto unknown or at least unreported. It brought to light a striking number of different constructions and characteristic features. For the first time, all these varieties have been grouped and described; representative specimens were photographed. For certain aspects such as sewing structures, drawings were added, since a simple line drawing helps to understand the sometimes not so photogenic sewing systems. All these particularities and differences have converged into a substantial section of the present

study, Part Two, which in itself bears witness of the richness of the Islamic bookbinding tradition. The features have been organised according to the regular sequence of binding operations. This was not only the most natural way of presenting the methods and characteristics, it will also promote the understanding of the structure of the book for those readers who lack the technical background. Additionally, this systematic presentation facilitates easy reference for those readers who want to compare the technical descriptions as presented in the literature analysis, Part Three, with the images of the structural components in Part Two.

Comparative study of the literature

History has left us five historic treatises on bookbinding in the Islamic world, and these are analysed first, before exploring the secondary literature on materiality and structure. Although the historic sources are well known among scholars working with Islamic manuscripts, a detailed comparison has never been made. My perspective as a craftsman, which involved the testing of technical possibilities and practical work procedures, is also a novel approach.

The secondary literature is not a coherent group of publications. Very few books actually deal with the making of Islamic manuscripts as a composite artefact; often the structure is dealt with in the margin of another topic. Therefore, these secondary sources are not discussed chronologically, like the historic treatises. They are grouped according to their scope. Starting with general reference works so as to outline the broadly accepted characterisation of the Islamic book, a prominent place is given to the fundamental studies in Islamic bookmaking. The basis was laid by Gulnar Bosch et al. (1981).³ Further learning is presented in two outstanding works on Islamic codicology, by François Déroche (2000) and Adam Gacek (2009).⁴ These detailed studies are augmented by smaller contributions, which are often subchapters in studies with a different focus. They are arranged chronologically, with a few exceptions, for example to group the output of a single author (as in the case with Gacek), or when the importance of a particular publication required closer attention.

Some interesting details can be distilled from observations recorded by conservation specialists. As such information only became available in the last decades of the twentieth century, and because a development is noticeable in the approach of conservators, these contributions are arranged in pre-twenty-first-century and twenty-first-century material.

The way Islamic manuscripts as book structures or artefacts are generally perceived, however, is perhaps best represented by the cursory sentences on the making or characterisation of Islamic manuscript structures as found in several reference works or in the subchapters of books dealing with stylistic aspects of Islamic book design. It appears that *the Islamic manuscript* is often misrepresented or dismissed as a beautifully designed but weak object, its composition merely a case structure that does not really suffice as a protective and supportive cover. This general assumption is all the more interesting, since it does neither corroborate the technical details provided by the historical treatises, nor the results of thorough examination of many original manuscript structures. How widespread this perception is also becomes clear from the approach and attitude of conservation specialists. While the reasons for the misconception are explored in Part Two (on the anatomy of the Islamic manuscript) the last paragraphs in the literature analysis illustrate its detrimental consequences: reports from Western conservators clearly show how often they feel inclined to 'improve' the structure of Islamic bindings, thereby turning them into hybrid objects which no longer reflect the approach of their original manufacturers.

³ G.K. Bosch, J. Carswell, and G. Petherbridge, *Islamic bindings and bookmaking* (1981).

⁴ F. Déroche, *Manuel de codicologie des manuscrits en écriture arabe* (2000); English translation *Islamic codicology: an introduction to the study of manuscripts in Arabic script* (2006); A. Gacek, *Arabic manuscripts. A vademecum for readers* (2009).

Surveying the collections

Examining the physical aspects of many bindings is a time-consuming task, and undertaking a study such as the present one requires a well-considered but at the same time pragmatic approach. The actual survey forms the nucleus of the study, and decisions made with regard to the inclusion or exclusion of binding elements therefore resonate throughout the results. As a consequence, one could be tempted to include as many elements as one can, in as much detail as possible, lest the omission of certain particulars be regretted later on. However, such an approach would be a pitfall that slackens the research considerably. On the other hand, pruning the survey too much would result in loose facts and an insufficient basis to establish relations between the different composite parts or methods. Compromising between too pragmatic and too careful, it was decided to exclude certain details of binding characteristics and a fair number of textblock elements in the present study. For example, the exact thickness of the boards was not measured, nor did I record the lay-out of the text-panel or the colour palette applied with each manuscript. An account for these decisions, as well as an explanation of the database, which was designed for the purpose of the survey, are given in Part Four, preceding the quantitative results of the assessment.

Whereas the results of the physical assessment of the manuscripts generated quantifiable data concerning predominant methods and materials, they also pointed out less frequently used techniques. To increase the value of these findings, they were further qualified by linking them to the available data on provenance, date and place of origin, while at the same time the manuscripts with replacement sewings were deselected. The outcome of this diachronic approach is found in Part Five. Bearing in mind the restrictions posed by the formation and focus of the Leiden Oriental collections, these results can only be a starting point for classifying Islamic binding techniques. Nevertheless, certain lines of development and trends came to light, pointing out avenues of interest for further study, which will be addressed in the last, recapitulating chapter, Part Six.

Terminology

In this study, the term *manuscript* refers to a codex; other, unbound manuscript materials such as letters or archival papers fall outside the scope of the present study. With the term manuscript I also denote a single physical entity, a volume. The item can easily consist of two or more texts, and in fact it often does. For the purpose of this study it would, however, complicate matters if such composite volumes were not referred to as one manuscript.

The bibliographical data is largely based on Jan Just Witkam's *Inventory* (2006-2007), and the catalogue of Turkish manuscripts by Jan Schmidt.⁵ All dates are according to the Common Era (CE) calendar.

A codex is a complex artefact, and in order to describe its physical details, the use of terminology is indispensable. The technique of Islamic bookbindings warrants its own vocabulary. Indeed, Islamic manuscript structures and bindings have their own characteristics, unknown in books made in other cultures. In addition, some terms used to describe Western bindings proved to be inappropriate for Islamic bindings. Furthermore, even for relatively well-informed manuscript scholars, the differences in nuances between certain terms may be unexpectedly detailed, yet crucial for a good understanding of the functionality or composition of the objects described. For easy reference, a glossary is found in Appendix I.

⁵ J.J. Witkam, *Inventory of the Oriental manuscripts in Leiden University Library* (2006-2007). <http://www.islamicmanuscripts.info/inventories/leiden/index.html> (accessed January-August 2013); J. Schmidt, *Catalogue of Turkish manuscripts in the library of Leiden University and other collections in the Netherlands*, volumes 1, 2 and 3 (2000-2002-2006).

