

Manuscript and Print in the Islamic Tradition

Studies in Manuscript Cultures

Edited by
Michael Friedrich
Harunaga Isaacson
Jörg B. Quenzer

Volume 26

Manuscript and Print in the Islamic Tradition



Edited by
Scott Reese

DE GRUYTER

The publication of this volume was funded by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) under Germany's Excellence Strategy – EXC 2176 „Understanding Written Artefacts: Material, Interaction and Transmission in Manuscript Cultures“ – project no. 390893796.

ISBN 978-3-11-077603-4

e-ISBN (PDF) 978-3-11-077648-5

e-ISBN (EPUB) 978-3-11-077661-4

ISSN 2365-9696

DOI <https://doi.org/10.1515/9783110776485>



This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. For details go to <https://creativecommons.org/licenses/by-nc-nd/4.0/>.

Library of Congress Control Number: 2022939849

Bibliographic information published by the Deutsche Nationalbibliothek

The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available on the Internet at <http://dnb.dnb.de>.

© 2022 with the author(s), editing © 2022 Scott Reese, published by Walter de Gruyter GmbH, Berlin/Boston. This book is published open access at www.degruyter.com.

Printing and binding: CPI books GmbH, Leck

www.degruyter.com

In memory of Kathryn A. Schwartz (1984–2022)

Contents

Scott Reese

Introduction — 1

Part I

Titus Nemeth

Overlooked: The Role of Craft in the Adoption of Typography in the Muslim Middle East — 21

J.R. Osborn

The Ottoman System of Scripts and the Mütferrika Press — 61

Kathryn A. Schwartz

The Official Urge to Simplify Arabic Printing: Introduction to Nadīm's 1948 Memo — 89

Mahmoud Jaber, J.R. Osborn, Kathryn A. Schwartz, Natalia K. Suit

Muḥammad Nadīm's 1948 Memo on Arabic Script Reform: Transcription and Translation — 97

Part II

Ulrike Stark

Calligraphic Masterpiece, Mass-Produced Scripture: Early Qur'an Printing in Colonial India — 141

Holger Warnk

***Cermin Mata* ('The Eyeglass'): A Mid-Nineteenth-Century Missionary Journal from Singapore — 181**

Scott Reese

'The Ink of Excellence': Print and the Islamic Written Tradition of East Africa — 217

Alessandro Gori

Early Ethiopian Islamic Printed Books: A First Assessment with a Special Focus on the Works of *shaykh* Jamāl al-Dīn al-Annī (d. 1882) — 243

Jeremy Dell

Printing and Textual Authority in the Twentieth-Century Muridiyya — 271

Andrea Brigaglia

‘Printed Manuscripts’: Tradition and Innovation in Twentieth-Century Nigerian Qur’anic Printing — 289

Sani Yakubu Adam

Technology and Local Tradition: The Making of the Printing Industry in Kano — 337

Indexes

Index of Personal Names — **357**

Index of Titles — **362**

General Index — **364**

Contributors — 373

Scott Reese

Introduction

One of the last great biases of the Western academy in relation to Islam centres around the issue of mechanical print.¹ The first successful Muslim owned printing press dates only to 1727 and the Ottoman grant of a license to İbrahim Müteferrika – a state functionary and entrepreneur – to establish a business devoted chiefly to the publication of works of a secular nature including history, geography, government organisation and occasionally science.² Because the printing press was established in the Islamic world a full two and a half centuries after Gutenberg, Western-trained scholars have adopted the question ‘why so late?’ as a near mantra. Until recently, the answers to this query have focused almost universally on Muslim shortcomings: Muslim disdain for Western science, a cultural obsession with calligraphy that could not be emulated by type, a fear of ‘defiling’ the sacred texts through the printing process, and the jealousy of the ulama who feared type posed a threat to their religious authority. Indeed, one persistent myth held that the Ottoman sultan, Bayazid II – prodded by the religious elites – banned all printing at the end of the fifteenth century, violation of the *firman* being punishable by death.³ All of these have been offered up as explanations for the late adoption of mechanical print.⁴

One by one each has been dismantled. There exists no convincing evidence for a Muslim disdain for print or a belief that a tool of the unbelievers would desecrate the holy scriptures. Most important, there is no evidence for the existence of Bayazid II’s supposed decree.⁵ Indeed, important evidence exists to suggest just the opposite, that Muslim intellectuals and leaders understood print as a powerful and useful tool. In fact, a Muslim predisposition towards the efficacy of print can be found in the earliest works produced by Müteferrika. Appended to each of the first books in 1729, was a *fatwa* or religious opinion

1 This longstanding and misguided trope in modern scholarship dates to the 1950s with works such as Carter 1955, Febvre and Martin 1958, and is perpetuated more recently in Coşan, Miceli and Rubin 2009.

2 See Osborn, this volume.

3 Faroqhi 2000, 94–96; Finkel 2005, 366. Indeed, J.R. Osborn speculates that, if a ban did exist, it may have targeted only certain types of texts rather than establishing a prohibition against print (Osborn 2017, 106–108).

4 See, for instance, Atiyeh 1995; Roper 2013.

5 Schwartz 2015, 18–25; Osborn 2017, 106.

given by *Sheikh ūl-Islam* Abdullah Effendi, who was tasked with providing official religious blessing to the publisher's endeavour by the Ottoman Court: 'If a man undertakes to imitate the characters of handwritten books', he was asked, '[...] by forging letters [of metal] making type and printing books conforming absolutely to handwritten models, is he entitled to legal authorisation?'. The scholar replied: 'Allahu alim [only God can say]. [But] when a person who understands the art of the press has the talent to cast letters and make type correctly and exactly, then the operation offers great advantages'.⁶

The 1729 fatwa, cited in two of this volume's chapters, is critically important for two reasons. First, it shows that Muslim religious authorities, in the Ottoman Empire at least, bore no hostility towards mechanical print for religious or any other reasons. Indeed, as *Sheikh ūl-Islam* Abdullah noted, it offered 'great advantages'. Equally important was the timing of this notice. A growing body of scholarship holds that the eighteenth century was also a critical period for the evolution of print in Europe. Strong scribal traditions continued there well into the 1700s and it was only late in the century that print attained an unchallenged position of pre-eminence across society.⁷ Perhaps the question we should be asking is not why did Muslim printing appear 'so late' following Gutenberg, but where does print fit within the Islamic written tradition? That is the question with which this volume concerns itself.

1 Towards an Islamic written tradition

In his brief but influential 1986 work, *The Idea of an Anthropology of Islam*, Talal Asad proposed that Islam should not be approached as a static set of beliefs. Rather, in his estimation, it is more profitably viewed and explored as a malleable and inherently adaptable 'discursive tradition'.⁸ This approach is one that has gained increasing currency among Islamic studies scholars, the most relevant of whom, for our purposes, is Samira Haj. Her book *Reconfiguring Islamic Tradition* is a re-examination of the thought of the Arabian and Egyptian religious reformers Muhammad ibn Abd al-Wahhab (d. 1792) and Muhammad Abdu (d. 1905) within the context of 'discursive tradition'. As such, it does not deal directly with notions of writing or print. However, the ideas she posits regarding

⁶ Osborn 2017, 117.

⁷ Sajdi 2014, 116–117; see also Johns 1998.

⁸ Asad 1986.

the nature of tradition and its implications for how we comprehend social, cultural and intellectual evolution are instructive for the way we understand the emergence of print. Thus, it is an idea that bears revisiting in some detail.

Although within the last two or three generations, scholars of Islam have managed to drop most of the worst tendencies represented by Orientalist thought, most academics have continued to measure Muslim ‘progress’ using Western yardsticks. So, Haj notes, Muslim reformers are defined as modern ‘only to the extent that they employ modern [European] material and institutional resources’⁹ and ideas. Modern Islamic reform is presumed possible only through the adoption of these.

It does not take a great leap of imagination to see how a similar critique can, and should, be applied to how scholars have spoken about the emergence of print in Muslim society. As Osborn and Nemeth point out in this volume, along with many others throughout the field, the widespread adoption of print by Muslims in the nineteenth century is always portrayed as making up for an earlier ‘absence’, ‘lack’, or ‘failure’.¹⁰ This is in large part due to the application of Western benchmarks as markers of ‘progress’ that results in a kind of technological determinism.¹¹ If the trajectory of Islamic print does not adhere to the same indicators, it is by definition an aberration from the Western norm.

As Haj has demonstrated, a much more fruitful approach is to engage with Islamic institutions within their own ‘discursive tradition’, a process that consists of ‘historically evolving discourse[s] embodied in the practices and institutions of communities’.¹² ‘Tradition’ she writes, ‘refers not simply to the past or its repetition but rather to the pursuit of ongoing coherence by making reference to a set of texts, procedures, arguments and practices’ that constitute a perceived canon.¹³ But, rather than a rigid, unchanging body of knowledge, Muslim communities engage in a continuous reinterpretation of this canon, enabling them, in the words of Adeline Masquelier, ‘to respond to the conditions of a changing world’.¹⁴

For Haj, the primary focus of the ‘discursive tradition’ is the emergence of ‘modern’ Islamic reform within the context of a much longer history of Muslim intellectual endeavour. But a similar case can be made for understanding the

⁹ Haj 2009, 2–3.

¹⁰ Osborn and Nemeth, this volume; Sajdi 2014 and Schwartz 2015.

¹¹ Sajdi 2014, 122.

¹² Haj 2009, 4.

¹³ Haj 2009, 5.

¹⁴ Masquelier 2009, 24.

history of print not as an innovation belatedly adopted from the West, but as a technology and a paradigm that emerges as part of a historically deeper Islamic tradition of writing that evolves and changes to fit the needs of Muslim societies. Ample evidence of such change exists in the secondary literature. However, few scholars discuss such transformations as part of an on-going discursive process that takes place across space and time. One notable exception to this is Ahmad El Shamsy's recent book, *Rediscovering the Islamic Classics*. In an amazing feat of erudite detective work, El Shamsy convincingly demonstrates how a small cadre of Egyptian and Ottoman elite bibliophiles resurrected many of the foundational works of the Islamic classical tradition from what he describes as a post classical malaise. Equally important, his work constitutes an excellent illustration of the evolution of the Islamic written tradition as works moved from manuscript into print within the context of the late Ottoman Empire; a tradition that stretched back more than twelve-hundred years by this point.¹⁵

The essays in this volume seek to further complicate this picture. As such, there are several things we must bear in mind from the outset. First, the Islamic written tradition was, and is, a process whose creators included not just those from the so-called Arab heartland but the far wider global *Umma* or community of believers. So, while we can argue the existence of a single Islamic written tradition, it is a whole constructed from many parts. Second, the written tradition is inherently discursive. Writing systems and texts, of course, must be created by people. As such, the various elements of written expression (e.g., scripts, genres, punctuation and accepted conventions to name but a few) only emerge through processes of discourse about what is and what is not acceptable. Finally, participation in the written tradition was hardly the sole purview of intellectual elites. Most studies of reading and writing in Islam – especially those focused on the pre-modern period – have tended to concentrate on the scholarly production of elites. This is due largely to the sources that have survived, as modern scholars readily admit.¹⁶ In practice, however, it was a tradition of writing from which all Muslims could draw from and contribute to regardless of geographic location or social status. This is a feature that becomes increasingly clear as we move closer to the modern with a larger array of surviving source material available to scholars.

Written Arabic was in its infancy at the time the Prophet appeared in the seventh century. By the eighth century, however, a sophisticated scribal tradition had emerged as the dominant paradigm for the transmission of knowledge.

¹⁵ El Shamsy 2020, 4–5.

¹⁶ See Hirschler 2012.

Some of the earliest genres to emerge included poetry, based on pre-Islamic models, prose works for courtly behaviour crafted from middle-Persian prototypes as well as bureaucratic writing that served the needs of the growing Islamic state. But at the centre of the written tradition lay what became known as the *‘ulūm al-dīn* or the religious sciences. Including Quranic commentary (*tafsīr*), jurisprudence (*fiqh*) grammar (*naḥw*), theology (*‘ilm al-tawhīd*) and mysticism (*taṣawwuf*), among others, the disciplines developed specific genres of texts that took on particular hallmarks. The question-and-answer format of classical *fiqh* texts, the marginalia commentary used to annotate classical theological works and augmented five hemistich poems of *takhmīs* collections are all standard forms that date to the height of Islamic learning in the medieval centuries of Islam. In addition, various conventions emerged that served to legitimate and authorize texts as correct, authentic knowledge. The concept of the *ijāza*, or literally a ‘license to transmit’, is well known, but this was hardly the only safeguard put in place to ensure that not only were those who transmitted texts qualified to do so, but that the knowledge contained therein was ‘correct’ and rightly guided. Dictation, formal public readings, drafts and ‘clean’ copies that were checked and checked again, notifications of which were carefully placed in the final written manuscript.¹⁷

However, this tradition was hardly stagnant, and changes regularly occur as responses to the needs, demands and difficulties encountered by the authors, as well as the consumers, of written artefacts. Konrad Hirschler has noted, for instance, numerous syntactical and punctuation innovations that appeared in Arabic prose between the twelfth and fifteenth centuries were driven largely by a documented growth in readers and part of an effort to make the written word more accessible.¹⁸ Nir Shafir has demonstrated the emergence of another consumer-driven innovation in the seventeenth century, the appearance of pamphlets as a relatively new genre of writing in the Central Islamic lands.

Shafir argues that historians of the Islamic book have tended to focus primarily on works produced for the religious sciences. Such books were linguistically and conceptually complex and correspondingly expensive. As such, they were aimed at a very limited, elite audience. From the mid-seventeenth century at least, there began to appear various types of cheap books that included ‘stories and tales (*hikāya*) and catechismic texts (*‘ilm al-hāl*)’, and possibly most important, polemical pamphlets. Inexpensive, brief and written in clear accessible prose, these hand-written booklets – produced in their hundreds,

¹⁷ Pedersen 1984; Messick 1993; Déroche 2006.

¹⁸ Hirschler 2012, 19.

if not thousands – reveal the presence of a growing reading public outside the religious and political elites, albeit one that was primarily urban.¹⁹ So, in the mid-seventeenth century, Islamic textual traditions and genres, even in the Arabic heartland, were already shifting regardless of whether print was being utilized or not.²⁰

Manuscript pamphlets represented a relatively innovative element of the written Islamic tradition. Referred to as *risālas* or treatises, they were not only cheap, but enabled and encouraged individuals to read independently outside the madrasa setting.²¹ As such, ‘manuscripts [acted] as agents rather than the ideas inscribed within’. They were written artefacts ‘that ...encouraged superficial and visual reading, a practice outside the traditional social strictures of learned society’.²² Equally important, these were not objects that encouraged spiritual contemplation or simple moral self-improvement. Rather, they were ‘purposefully argumentative texts, made to be used by groups of skilled and unskilled readers who wanted ready access to arguments and proofs to deploy in debates’.²³ Most were devoted to a variety of legal and social debates including the acceptability of certain religious practices and cultural innovations such as the consumption of coffee and tobacco both of which were held by some to be indicative of declining societal morality.²⁴

In many cases, the authors of such tracts were noted scholars. Ibn Taymiyya was an early example, while probably the most prolific among late seventeenth- and early eighteenth-century pamphleteers was the Damascene Abd al-Ghani al-Nabalusi (1642–1731), who wrote more than two hundred pamphlets during his lifetime.²⁵ But, as readership was beginning to change in the early modern era, so was authorship. In her book, *The Barber of Damascus*, Dana Sajdi discusses the rise of ‘nouveau literacy’ in the Levant from the mid eighteenth-century. A certain level of literacy had long existed in urban settings outside of the religious and political elites.²⁶ However, by the eighteenth century, in Syria at least, literary endeavours were being taken up by locals of disparate backgrounds who seemed to have viewed it as a mode of creating their own cultural capital. Mostly through the genre of chronicle, or local histories, people as

¹⁹ The following is taken from Shafir 2016, 86–97.

²⁰ For a detailed discussion of Europe see Johns 1998.

²¹ Shafir 2016, 93.

²² Shafir 2016, 87.

²³ Shafir 2016, 88; also, Terzioglu 2013, 83.

²⁴ Shafir 2016, 94.

²⁵ Shafir 2016, 120.

²⁶ See Hirschler 2012 for a full discussion of this.

varied as Shi'i farmers, Greek Orthodox priests and a barber from Damascus used writing as a way to lay claim to authority in a political and social landscape that was quickly changing.²⁷ This occurred, Sajdi notes, as regional provincial elites such as large landowners, merchants and tribal chiefs were rapidly emerging to challenge the presumptive power of the Ottoman state. Driven by economic issues, growing sectarianism and a more general desire for regional autonomy within the Ottoman structure, Sajdi argues that written expression in local Arabic vernacular became one tool of this upward mobility.²⁸

Whether or not Sajdi is correct about such works as tools for acquiring social and cultural capital – these were, after all, works with a limited distribution – they do represent the emergence of a new genre within the tradition. The *yam'yyat* or daily chronicle were works of history composed by non-elite authors frequently in various registers of Arabic – both literary 'classical' and more colloquial language. In these we certainly witness the emergence of a new set of voices often expressing their dissatisfaction with their social and political betters and with sufficient examples to be regarded as a new branch in the written Arabic tradition, one that seems to presage the seemingly explosive growth of readers, authors and written objects in the following century.²⁹

2 Mechanical print and the Islamic written tradition

In this light, the adoption of print in the nineteenth century should not be understood as a sudden break with the past. Instead, it is more profitable to approach Islamicate print as emerging within the framework of an Islamic written tradition. Rather than a sudden print 'revolution', the mechanical production of writing in Muslim contexts developed through various continuities and adaptations to changing circumstances over a long period of time. This is what J.R. Osborn refers to in his contribution to this volume as a 'long revolution', a term coined by Raymond Williams.³⁰ European technological innovation, imperial expansion and Christian missionization are certainly part of this picture. But these were hardly the only determining factors. Local contexts such as

²⁷ Sajdi 2014, 19.

²⁸ Sajdi 2014, 15–20

²⁹ Sajdi 2014.

³⁰ Osborn, this volume, referring to Williams 1961.

geography, economics, political culture and not least of all aesthetic tastes, also played a role. But, essential in the decision-making process of Muslims when turning to mechanical print is an element that has been hitherto neglected: the previous twelve-hundred years of writing culture and book production.

The papers in this volume seek to push our understanding of the Islamic written tradition beyond the so-called Arabo-Persian heartland. While two of our contributors focus on the development of print within the Ottoman realm and the 'Nadim memo' focuses on Arabic reform in Egypt, the remaining seven contributors all direct their efforts outside this supposed core. Five essays focus on print in Africa as well as one each for South and Southeast Asia. This regional emphasis is not accidental. Indeed, it is intended to illustrate that scholarly examination of the Islamic written tradition demands a broader geographic scope. Africa, South and Southeast Asia are as central to this discursive tradition as the Arab lands, Persia, and Turkey. The distribution of essays pulls the written tradition outside the so-called 'heartland', in a way similar to Clifford Geertz's attempt to stretch the examination of Islamic practice from east to west in *Islam Observed* fifty years ago.³¹ If we do not embrace the full geographic diversity of Islamic practice, our scholarship risks reinscribing the same tropes that we argue against: just as Islamic printing *writ large* should not be measured by European standards as an outsider looking in, Muslim written practices in Africa, Asia or anywhere else should not be measured against an imaginary Middle Eastern core.

The papers in this volume are divided into two – albeit unequal – parts. The contributors in Part I directly take up the supposed hesitation of Muslims to adopt print. Both Titus Nemeth and J.R. Osborn hold that rather than an 'irrational' aversion to new technologies, the reservations of the Ottomans and other Muslims were grounded in very real technical and aesthetic issues that rendered print unattractive even while recognising its benefits.

As Nemeth argues, the poor quality of Arabic type prior to the late eighteenth century made print unattractive to readers and, as a result, a poor commercial investment. The earliest experiments with Arabic fonts were carried out primarily by non-Muslim Europeans who had little experience with a complex system that rendered them unable to cope with its many intricacies such as multiple forms for each letter or the super- and subscripted vowels. The result, he points out, was a product wholly unacceptable to readers. Even the relatively advanced press established by Müteferrika fabricated an aesthetically inferior product in comparison to even the most basic manuscripts. As a result, Nemeth

³¹ Geertz 1971.

holds, there were few incentives for Muslim entrepreneurs to invest large amounts of capital in a venture that had so little prospect of profitable returns.

J.R. Osborn in his contribution echoes these points but argues that it was not simply economics that informed Muslim, or Ottoman to be more precise, views on the value of print. Aesthetics, he notes, played an equally important role driven by what he refers to as ‘structures of feeling’, defined as ‘particular linkages, particular emphases and suppressions’,³² that can come to be representative of a culture in a given period. One such structure of feeling within Ottoman society, he notes, was script variation, ‘a textual practice in which visual and aesthetic differences of script, or styles of script, signify meaningful distinctions of textual genre and audience’.³³ Six classical scripts known as *al-aqlām al-sittah*, emerged as ‘recognizable and repeatable types’, for use within Ottoman society. Each ultimately became associated with particular kinds of texts and genres and which ‘readers learned to decipher [...] as a secondary code’, encrypting certain meanings. Thus, one script, for example, came to be associated with religious writings while another with royal decrees etc. Initially, print could not hope to replicate this complex code of meanings. Overtime, however, it did find its own niche as a script associated with the bureaucratic state. Osborn argues that ‘the Ottoman shift from a manuscript-dominant society to the adoption of print took time’ and was in effect ‘a long revolution’.³⁴

As such, Müteferrika’s effort was a venture that while in the short term might be viewed as only a limited success set in motion a series of processes whereby print would, Osborn argues, emerge as a new genre or style of script that signalled the production of a new kind of written object – the printed book – that was devoted to, among other things, science, mathematics, history and diplomacy aimed at an audience of bureaucrats and state functionaries rather than religious elites. Müteferrika’s press was a beginning – and not an end – that took more than fifty years to bear fruit. He did not revolutionize the Islamic written tradition but he did nudge it in a new direction, setting in motion changes that would develop and spread over time. This long revolution finally took hold with the founding of an Ottoman State press in 1797.³⁵ Pasha Muhammad Ali of Egypt continued this trend with the establishment of a state press at Bulaq in 1820 with the first books produced in 1822.

³² Osborn, this volume. Also, Williams 1961.

³³ Osborn, this volume.

³⁴ Osborn, this volume.

³⁵ Nemeth, this volume.

So, the Mütferrika interlude notwithstanding, the widespread adoption of mechanical print in Muslim lands dates to the 1820s. But, importantly, Islamicate mechanical reproduction did not follow a single technological trajectory. By the time Muslim states and individual actors turned to print as a means of large-scale production there were two major technologies available. First, of course was ‘moveable type’ or typography invented by Johannes Gutenberg in the mid-fifteenth century and virtually the only means of mechanically reproducing texts for nearly four hundred years. In the late eighteenth century, however, Alois Senefelder (1771–1834) developed a technique for printing that created text – and images – not through the use of individual punch cut letters but by etching on flat, stone tablets and reproducing the image using a combination of grease and acid-resistant ink. By the end of the Napoleonic Wars, lithography (literally, ‘stone printing’) was a proven technology with broad applications. In Europe, however, it was used primarily for printing designs on cloth, sheet music and producing pictures as either inexpensive pieces of art or for books. It never emerged as an alternative to typography.³⁶ But, in the Islamic world, lithography was quickly adopted for the large-scale printing of books.³⁷ As such the articles in this volume examine cases where both technologies were in play. However, the technology itself is less of a focus, than the ways in which mechanical reproduction fit into and changed the broader Islamic written tradition.

Print, from this point forward, would emerge as an increasingly integral element of the Islamic written tradition. This is evidenced first by the exponential rise in print production over the course of the nineteenth century. From the 1830s print rapidly transcended its place as a medium serving the needs of the state to one with far broader social appeal. It soon became an important new venue for the dissemination of countless new Muslim voices. This included, of course, religious knowledge – both old and new – but also new genres (e.g. political treatises and novels) and types of written objects (e.g. newspapers).³⁸

But while print in many ways transformed the written tradition – at the very least in terms of volume and accessibility – it was also forced to conform to it. There is no better illustration of this than the continuous efforts to refine the always problematic Arabic moveable type to enable it to fit more easily into the

³⁶ Senefelder 1911; Proudfoot 1997.

³⁷ It needs to also be pointed out that numerous other non-European societies such as those in Persia, China and Southeast Asia also turned to lithography as a means of reproducing the written word.

³⁸ It should be pointed out that some of these new texts were printed, while others were handwritten. Taken together, these new genres demonstrate a shift in the written tradition regardless of medium.

deeper tradition. As Nemeth points out, one of the biggest problems with early Arabic type was that it was ugly and unpleasing to the eyes of the reader. This was an issue with which Arabic typographers never ceased to struggle. Muhammad Nadim's Memo to the Royal Academy of the Arabic Language in Cairo, the volume's third contribution, provides us with a succinct introduction to script reform up to the era of the Second World War. In her overview of the memo, Kathryn Schwartz highlights the ongoing concern among intellectuals and artisans to make Arabic more 'user friendly' and easily readable for a broad public, without betraying the technical and emotional structures of the language. For instance, Muhammad Nadim noted, 'the word of majesty (الله) [for God] [...] is much in circulation and use and it carries a special value which should be respected and preserved'.³⁹ As such, he recommended, it should never be broken into its constitutive letters but instead always appear in print as a unified word.

3 Exploring the tradition more broadly

The articles in Part I focus primarily on the development of print and the efforts of Muslims to fit it into the already existing tradition particularly within the so-called Islamic heartland of Egypt and the Ottoman Empire. The essays in Part II cast a broader net in the form of case studies across time, geography and technology exploring the various contours of the evolving Islamic written tradition once print entered the equation. It thus emerges as not the story of Arabic print, but of the Islamic written tradition in its broadest sense.

In Egypt and the Ottoman heartland printed book production was dominated by typography or 'moveable type'. However, not all Muslim communities found this method of mechanical reproduction equally attractive. Indeed, for some, lithography was ultimately deemed a more appropriate technology. Ulrike Stark illustrates this point in her contribution on Qur'an production in nineteenth-century South Asia. Indian Muslims turned to print nearly as early as their Egyptian and Ottoman counterparts and the Hooghly edition of the Qur'an, produced in Calcutta, appeared in 1829. Stark, however, notes this and other early typeset versions of the scriptures were seriously lacking in aesthetic appeal, and through 'their rather crude typefaces and sparse use of ornamentation, they display the technical constraints of movable type printing and presumably had

³⁹ Nadim's memo, transcription f. 7, this volume.

little visual appeal for Muslim readers'.⁴⁰ Compared to India's sophisticated manuscript tradition, Arabic script works produced with moveable type hardly constituted an advance. For this reason, at least in part, it seems South Asian entrepreneurs – led by the indomitable Naval Kishore – soon shifted almost universally to the use of lithography which held obvious advantages not only for printing scripts that were cursive in nature but also enabling greater ornamentation as well as colour (albeit in limited amounts).

Holger Warnk's contribution, focuses on *Cermin Mata* ('The Spectacles'), a journal produced by Christian missionaries in mid-nineteenth-century Singapore. A missionary journal would hardly seem to fit within a collection devoted to the Islamic writing. However, while certainly a publication intended to promote mission work, the journal also highlights the continued importance of the local Islamic written tradition. The journal was produced in Jawi (Malay written in Arabic script) and many of those who wrote for it were themselves traditionally trained Muslim Munsyis, or scribes. As Warnk points out, this led to not only a certain standardization of Jawi handwriting⁴¹ but also promoted Malay-Islamic written culture. While containing numerous pieces that upheld and promoted European Christian values, *Cermin Mata* featured numerous stories from the local Malay repertoire as well as the unfinished Hajj account of a prominent Malay man of letters, known simply as, Abdullah Munsyi. The stories in *Cermin Mata* also had a life beyond the mission journal finding their way into the curricula of both mission and government schools of Malaya, as well as the coffee houses of Singapore where copies were read aloud for popular entertainment.

The next several contributors, Scott Reese, Alessandro Gori and Jeremy Dell, all take up the evolution of typographic print among different African Muslim societies and the ways in which local practice had an impact on the larger written tradition. Reese's 'The Ink of Excellence', examines the role of Egyptian publishers in the evolution of local print culture among Muslim scholars in coastal East Africa. But it also tackles the ever-evolving written tradition looking at some of the ways print changed religious composition while also identifying the many ways in which print incorporated the structures of the manuscript tradition; including the shape and content of books, but also markers of scholarly

⁴⁰ Stark, this volume.

⁴¹ The standardization of handwritten styles and regional styles, either before print or alongside printing, seems to be a key feature of the Islamic written tradition and a feature that is rarely problematized in European-based models of print development. Personal communication J.R. Osborn. See also Bondarev, Gori and Souag 2019.

authority such as chains of transmissions, practices of ‘emendation,’ editing and the resurrection of the medieval practice of the scholarly ‘blurb’ or *taqrīdh*. This last practice is particularly instructive as its revival seems to have been driven by the East African authors of printed books rather than their Egyptian counterparts.

Remaining in Egypt, Alessandro Gori’s contribution, ‘Early Ethiopian Islamic Printed Books’ offers a companion view from the Horn of Africa. Following the trajectory of a single book from manuscript to printed form, Gori describes the origins of print production in Ethiopia and the international linkages that made it possible. In addition, his essay also provides some important insights in the continued production of manuscripts among Ethiopian Muslims well into the late twentieth century. Finally, Jeremy Dell’s contribution shifts our view westward to modern Senegal. It recounts the history of early efforts to print the *xasida*,⁴² of the Muridiyya Sufi order’s founding saint Shaykh Amadu Bamba (1853–1927). In particular, it tracks the attempts of the movement’s leadership to assert control over Bamba’s legacy following his death by regulating its production in print. It is also a larger Muslim story, however, as he highlights the relationships that emerged between Murids in Senegal and publishers in Morocco, Tunisia and Egypt as the leadership sought authoritative outlets for the great Shaykh’s work.

The last two essays in our volume stay in West Africa but take us back to the world of lithography. While, as Dell’s article illustrates, typographic print had its place among Muslim publishers in West Africa, it was not always the preferred mode. The contributions by Sani Adam and Andrea Brigaglia focus on the development of offset lithography⁴³ in the Nigerian city of Kano in the period after World War Two. Adam’s contribution, ‘Technology and Local Tradition’ provides an overview of the development of Arabic and Hausa Ajami print in Kano. Among his findings is that while there were attempts to jumpstart an Arabic print industry in Kano prior to the 1950s the industry only really took off after the introduction of offset lithography. He holds there were several economic and political reasons for the late development. However, among the most important factors were aesthetics. It is this issue that Brigaglia takes up in his contribution, “‘Printed Manuscripts’: Tradition and Innovation in Twentieth-Century Nigerian Qur’anic Printing’. Much like in South Asia, Brigaglia finds that especially when it comes to the Qur’an, the notion of typeset holy scriptures

⁴² Pronounced *qaṣīda*, these are praise poems often, but not exclusively associated with Sufism.

⁴³ Sometimes referred to as offset printing.

was wildly unpopular. Instead, even while a market emerged for various kinds of religious texts printed typographically, local tastes continued to prefer hand copied Qur'ans in the local Sudanic Arabic script. This meant Qur'ans remained an expensive, luxury item. The introduction of offset lithography from the 1950s enabled the production of Qur'ans in a medium that local households found appealing. This had two important impacts. First, it made locally copied Qur'ans relatively affordable. While not cheap by any means, adoption of offset lithography meant that more people could potentially afford to purchase a Qur'an reproduced in the local style. It also created something of a renaissance for Kano calligraphers. Prior to the 1950s, calligraph was a stagnant if not dying profession. With offset lithography the profession experienced a massive revival with the work of masters coming into increasing demand and even injecting much need creativity with the introduction of new styles. As such, the machine age played a direct role in retaining and even energizing an important local element of the written Islamic tradition.

4 Conclusion

As noted earlier, the essays in this volume represent an early and ongoing effort to understand the complexities of the Islamic written tradition as it evolved in the age of print. The contributors and I hope that readers will take several things away from this book. This includes not only the diverse nature of mechanical print in the Islamic world, but also its emergence in dialog with the much longer written tradition.

One of the primary touchstones for this volume is the extension and application of the Asadian notion of discursive tradition in order to illuminate the existence of an Islamic tradition of the written word. The essays in this book argue that the adoption of print among Muslim societies did not represent a break from the past, but the continued evolution of a longstanding cultural practice: writing. The Islamic written tradition incorporated new technologies (e.g. moveable type, and lithography in its various forms) not simply as replacements of earlier scribal practices but in dialogue with and alongside established handwritten and calligraphic traditions. While new technologies dominated certain genres, handwriting and calligraphy did not disappear. On the contrary, these new technologies were just as likely to rejuvenate handwriting and calligraphy as displace them in particular arenas. Lithography, for instance, actually required the retention of advanced handwriting skills as evidence by Naval Kishore's workshops. Going a step further, as Brigaglia

points out, offset lithography seems to have spurred a renaissance of calligraphic studios in Kano.

Furthermore, Islamic print's progress was inextricably bound to its hand-written past. The Islamic written tradition employs visual and formal distinctions of genre and regional style. Printing certainly altered stylistic practices of written composition. However, this took place only to the degree that printing could incorporate previous structures of authority, genre, layout and appearance among other things. Thus, as in the case of Egypt and printed books – whether classics or new compositions – we see a continuation of many visual stylistic components of the manuscript tradition but also conceptual elements, such as the imposition of oversight by a qualified *‘ālim*.

Finally, and possibly most important, the Islamic written tradition was and is hardly a monolith. Instead, it is geographically and regionally diverse, spreading across Muslim societies from east to west. As a discursive tradition, it has not only responded to and incorporated new structures of technology; it has a much longer history of responding to and incorporating diverse structures of culture, politics, and regional knowledge. While Muslim societies certainly adopted many of the central structures of writing that had come to be recognised as part and parcel of the Arabo-Persian written tradition, this still left space for local structures and concepts. The development of the Kinawi script in Nigeria and Jawi (Malay written in Arabic characters) in Southeast Asia are only two of the most obvious examples.

In the end, the Islamic written tradition's historical success may be due precisely to its seemingly inexhaustible adaptability. The incorporation of printing, in this light, appears as simply the co-optation of one technique among many that has helped retain the tradition's vibrancy.

Transliteration

Arabic, Persian and Turkish transliteration in the following volume follows that laid out by the *International Journal of Middle East Studies* (IJMES). However, some contributions include Islamic languages, such as Hausa and Wolof, that employ characters not appearing in other languages and thus have symbols unique to them. The authors of these contributions have been permitted to use such symbols in addition to those included in the IJMES system. Finally, as the question of transliteration's utility continues to be debated, authors have been allowed to exercise discretion with regard to the extent to which they use transliteration as long as internal consistency was maintained within each essay.

Acknowledgements

As with any endeavor, this volume would not have come to fruition without the assistance of many individuals and institutions. The articles in this volume began life as papers presented at a workshop titled: *There and Back Again: The Complicated Relationship Between Manuscript and Print in the Islamic Written Tradition*, held at the University of Hamburg 14–15 June 2019. This meeting was funded by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) under Germany's Excellence Strategy – EXC 2176 'Understanding Written Artefacts: Material, Interaction and Transmission in Manuscript Cultures', project no. 390893796. We must also thank the Centre for the Study of Manuscript Cultures (CSMC) at Universität Hamburg and its director, Michael Friedrich, who provided the physical space for our deliberations. Additional gratitude must go to Dmitry Bondarev and Jan van der Putten, my co-organizers, without whose help the work of holding this meeting would have been far more difficult. As always, the help of the Centre's administrative staff, particularly, Christina Kaminiski, Karsten Helmholtz and Daniela Niggemeier was indispensable.

It is also important to recognise the hard work and diligence of all the contributors to this volume. The deadline for the first drafts of articles coincided almost exactly with the onset of the COVID-19 pandemic in the early months of 2020. This has been a trying time for one and all, but despite the challenges of home isolation, on-line teaching and the stresses of navigating the 'new normal', every author in this collection worked to overcome these obstacles managing to produce works of exemplary scholarship.

In the production of this volume, I would like to single out J.R. Osborn, Michael Friedrich, Caroline Macé and Laurence Tuerlinckx for their insightful comments and editorial skills. I especially wish to thank Caroline for her seemingly endless patience with my penchant for sending her the wrong files.

As this volume was going to press, our community of scholars was devastated by the sudden loss of Kathryn A. Schwartz. Over the course of putting this book together, all of us came to know Kathryn as a brilliant historian, who was poised to make enormous contributions to the fields of Book History and Middle Eastern Studies. We also got to know a bright, funny and charming person whose insight and wit always inspired us. In her short career, Kathryn had already produced a number of articles and studies of significant impact and import, and we can only guess at the knowledge she would have produced with more time. We are confident that the base Kathryn created will form the foundation of much richer scholarship to come, serving as a reminder of the impact her life had on the field even in such a short time. It seemed only natural that this book should be dedicated to her memory.

References

- Asad, Talal (1986), *The Idea of an Anthropology of Islam, Occasional Papers, Georgetown University, and Center for Contemporary Arab Studies*, Washington, DC: Center for Contemporary Arab Studies.
- Atiyeh, George N. (ed.) (1995), *The Book in the Islamic World: The Written Word and Communication in the Middle East*, Albany: SUNY Press.
- Bondarev, Dmitry, Alessandro Gori and Lamine Souag (eds) (2019), *Creating Standards: Interactions with Arabic Script in 12 Manuscript Cultures* (Studies in Manuscript Cultures, 16), Berlin: De Gruyter.
- Carter, Thomas Francis (1955), *The Invention of Printing in China and Its Spread Westward*, 2nd edn, New York: L. C. Goodrich.
- Coşan, Metin, Thomas J. Miceli and Jared Rubin (2009), 'Guns and Books: Legitimacy, Revolt, and Technological Change in the Ottoman Empire', *Economics Working Papers*, 200912, <https://opencommons.uconn.edu/econ_wpapers/200912> (accessed on 9 Dec. 2021).
- Déroche, François (2006), 'Written Transmission', in *The Blackwell Companion to the Quran*, London: Blackwell, 172–186.
- El Shamsy, Ahmed. (2020), *Rediscovering the Islamic Classics: How Editors and Print Culture Transformed an Intellectual Tradition*, Princeton: Princeton University Press.
- Faroqi, Suraiya (2000), *Subjects of the Sultan: Culture and Daily Life in the Ottoman Empire*, New York: I. B. Tauris
- Febvre, Lucien and Henri-Jean Martin (1958), *L'apparition du livre*, Paris: Cercle de la librairie.
- Finkel, Caroline (2005), *Osman's Dream: The History of the Ottoman Empire*, New York: Basic Books.
- Geertz, Clifford (1971), *Islam Observed, Religious Development in Morocco and Indonesia*, Chicago: University of Chicago Press.
- Haj, Samira (2009), *Reconfiguring Islamic Tradition: Reform, Rationality and Modernity*, Stanford: Stanford University Press.
- Hirschler, Konrad (2012), *The Written Word in the Medieval Arabic Lands: A Social and Cultural History of Reading Practices*, Edinburgh: University of Edinburgh.
- Johns, Adrian (1998), *The Nature of the Book: Print and Knowledge in the Making*, Chicago: University of Chicago Press.
- Masquelier, Adeline (2009), *Women and Islamic Revival in a West African Town*, Bloomington: Indiana University Press.
- Messick, Brinkley (1993), *The Calligraphic State: Textual Domination and History in a Muslim Society*, Berkeley: University of California Press.
- Nemeth, Titus (2017), *Arabic Type-Making in the Machine Age*, Leiden: Brill.
- Osborn, J.R. (2017), *Letters of Light: Arabic Script in Calligraphy, Print and Digital Design*, Cambridge, MA: Harvard University Press.
- Pedersen, Johannes (1984), *The Arabic Book*, transl. Geoffrey French, Princeton: Princeton University Press [original Danish publication 1946].
- Proudfoot, Ian (1997), 'Mass Producing Houri's Moles, or Aesthetics and Choice of Technology in Early Muslim Book Printing', in Peter G. Riddell and Tony Street (eds), *Islam: Essays on Scripture, Thought, and Society: A Festschrift in Honour of Anthony H. Johns*, Leiden: Brill, 161–184.
- Roper, Geoffrey (ed.) (2013), *The History of the Book in the Middle East*, Vermont: Ashgate.

- Sajdi, Dana (2014), 'Print and its Discontents: A Case for Preprint Journalism and other Sundry Print Matters', *The Translator*, 15/1: 105–138.
- Schwartz, Kathryn (2015), *Meaningful Mediums: A Material and Intellectual History of Manuscript and Print Production in Nineteenth Century Ottoman Cairo*, PhD thesis, Harvard University, Cambridge, MA.
- Senerfelder, Alois (1911), *The Invention of Lithography*, transl. J. W. Muller, New York: Fuchs & Lang Manufacturing Company.
- Shafir, Nir (2016), *The Road from Damascus: Circulation and Redefinition of Islam in the Ottoman Empire, 1620–1720*, PhD thesis, UCLA, Los Angeles.
- Terzioğlu, Derin (2013), 'Where *ilm-i hâl* Meets Catechism: Islamic Manuals of Religious Instruction in the Ottoman Empire in the Age of Confessionalization', *Past & Present*, 220: 79–114.
- Williams, Raymond (1961), *The Long Revolution*, New York: Columbia University Press.

Part I

Titus Nemeth

Overlooked: The Role of Craft in the Adoption of Typography in the Muslim Middle East

Abstract: This article seeks to contribute a new perspective to the recently revived discourse about the beginning of printing with Arabic movable type in the Middle East. The historiography of Arabic print has only tangentially engaged with the visual qualities of texts, and when it has done so it often failed finding an approach that does justice to the appearance of documents. The fidelity of the typographic representation of the script, and questions related to craft, formal conventions, and the reading process, are barely addressed in scholarship of Arabic print history. Yet writing and print are visual media and cannot be fully understood without investigating their material properties. This paper therefore emphasises the materiality of typography and aspects of typographic craft and reminds us that print is foremost a trade which must fulfil certain requirements in order to thrive. The argument investigates Arabic typography for its fitness for purpose, juxtaposing economic factors, typographic considerations, and cultural aspects. Relating these elements to the reading process, this paper argues that formal criteria of typography are an overlooked explanation for the long disinterest of the Islamic world in typography.

1 Introduction

In a recent paper, Kathryn Schwartz renewed the debate on the beginnings of print in the Muslim Middle East and fundamentally challenged established explanations and lines of argument.¹ Demonstrating the porous foundations of a frequently repeated rationale, namely the lack of evidence for an alleged ban of printing by Ottoman sultans, Schwartz forcefully argued for a reconsideration of the origins of print culture in the Middle East. In her narration, European experiences and historiography of print defined how scholars approached and

¹ Schwartz 2017. Although Schwartz was not the first to challenge established narratives, her critique is the most substantive of recent publications. Another contribution that cast doubt on the historiography of print in the Middle East is found in Sajdi 2009.

assessed the trajectory of print in the Middle East, failing to consider the specificities of the region. According to Schwartz, enquiries into the regional history of print were always grounded in comparisons to the role the technology had played in Europe, imbuing the entire discourse with an ahistorical bias. Her paper closes with a demand for more fine-grained analysis, consideration of specific locales, ‘attention to practicality’, and a more critical attitude to sources and precedent. In her reading, the question ought not to have been why did the Ottomans not take up print, but rather why should they have printed?

Conversely, Schwartz’s paper, and most of the debate about the origins of printing in the Muslim Middle East, does not question why the Ottomans began to print when they eventually did. This leaves a considerable gap in our understanding of the adoption of the medium and does not appear to be fully consistent. Whereas fierce criticism is directed at the uncritical assumption that letterpress printing ought to have been taken up by every society that encountered it, this stance seems to soften once the Muslim Middle East adopted this Western import. Scholars largely seem to accept that by the nineteenth century printing had become inescapable, jettisoning the very arguments that are advanced to argue against technological determinism. Indeed, some of the evidence that is used to demonstrate the lack of interest of the Muslim Middle East in printing, could equally underline the puzzle of the late début. When Schwartz cites from the Ottoman writer İbrahim Peçevi’s (1574–1649) ‘Analysis of the Printed Writing of the Unbelievers’, it is meant to demonstrate that the Ottomans did not need printing:

The invention of printing by the unbelievers is a very strange art, and verily an unusual invention ... [I]t was devised in the year 1440 in [Mainz] by a wise man called Aywan Kutanbark [i.e., Johannes Gutenberg] ... [S]ince then all the books by the unbelievers are produced by printing ... When one intends to print a book, it is as hard as handwriting to arrange the types in lines. But once arranged one thousand copies can be printed in less time than copying one volume by hand.²

Yet, in Peçevi’s quote lies a compelling answer to the question that Schwartz poses: why print? Because ‘once arranged one thousand copies can be printed in less time than copying one volume by hand’. Although falling short of an explicit recommendation to adopt print, the rationale shows that Peçevi understood the potential

² Schwartz 2017, 28. Onur Yazıcıgil suggests a slightly more nuanced translation of the last sentence, which underlines Peçevi’s appreciation of the power of print: ‘But once arranged, in less time – printing a thousand volumes wouldn’t take as much trouble as writing (*khattı*) a single volume’. Personal correspondence with the author, 2021.

value and power of print. He appreciated that it allows for the multiplication of documents at a rate and volume that could not be matched by even an army of copyists, offering the key economic argument in its favour. Irrespective of the European experience of print, that the Ottomans and other Muslim societies could have seen relevance in this potential is apparent in Peçevi's account.

It also shows that its author had no qualms about comparisons with – and enquiry into – the ways of 'the unbelievers'. The juxtaposition of divergent trajectories of societies suggested itself to the contemporary observer, and why should it not attract historical investigation today? As Ami Ayalon argues in this context, 'grand comparisons between civilizations are too exciting and gratifying to avoid and should not be given up because of avertible methodological hazards'.³ Reducing the motivations and questions of generations of scholars to superficial Eurocentric biases appears like a simplification itself. As Schwartz acknowledges, the tentative explanations that were advanced thus far were diverse. They featured numerous aspects beyond the alleged ban on printing, including considerations of economic and demographic circumstances. Notably, parallels in technological transfers raise legitimate questions. We know that other techniques and inventions were readily embraced and adopted by the Ottomans, whether they had come from the East or from the West. The existence of 'scores of able copyists' – alluded to by Schwartz when asking 'why print?' – does not itself provide a convincing reason for the Ottomans to forego this new medium. After all, bowmen existed and yet firearms were taken up without hesitation. As Ayalon paraphrases David Landes, 'why [...] would the Ottoman state and its subjects in the Middle East turn their backs for such a long time on a device which had proven to hold so many benefits in neighboring Europe?'⁴

But more importantly, and beyond the comparison to Europe's history, the juxtaposition of the region itself, over time, may lead to the same question. For we know that printing *did* take off eventually, and that it burgeoned in a manner most scholars consider revolutionary. The second half of the nineteenth century saw a rapid spread and increase of printing and publishing activities throughout the region. As Orlin Sabev concludes a recent paper, 'by the 1870s the Ottomans seem to have become quite accustomed to printed books and were determined to resolve the incompatibility between the cursive Arabic script, in general use from the seventh century, and printing with movable type, which started only in the 1720s, in favour of the latter'.⁵ Yet how 'the Ottomans'

³ Ayalon 2016, 4.

⁴ Ayalon 2016, 5.

⁵ Sabev 2013, 117.

became accustomed to this new medium remains unanswered, and without discussing this aspect any analysis of the late *début* will remain incomplete.

What had changed by this stage that made the medium and the technology not only acceptable, but a resounding success? The scribes, evoked to explain both, the rejection of typography as well as why letterpress printing was unnecessary, were still practising their trade; the sultan was still in power, and had to fear the power of a public sphere as much as his predecessors in centuries past; the readership was still minuscule, albeit growing slowly; the *'ulamā's* conservative tendencies probably were not wholly different; the technology still had European origins, and crucially, it was still much the same as when it first arrived in the Ottoman Empire: in 1800 type was cut and cast almost identically to how it was done in the fifteenth century; it was still composed by hand using a compositor's stick; and it was printed on manual presses using hand-made paper. Gutenberg would have recognised every part of an early nineteenth century print shop.

Thus, it appears to me that despite the revised perspective we must ask again why did Muslims in the Middle East not print with type, if the purpose of the medium and its potential were clearly appreciated, and why did they change their mind so comprehensively in the course of the nineteenth century? What was so different if many, if not all the circumstances that feature in the discourse about the genesis of print publishing in the Middle East had barely changed?

In her conclusion, Schwartz emphasises the applied aspects of printing, noting that 'although printing has acquired meaning as a civilizing force, it is in the first instance an act'.⁶ Embracing her call for more detail and attention to practicality, I would like to add that printing is foremost a business. Whereas there are instances in which printing loses commercial aspects, which I will address later, as a mass medium of the public sphere printing is first of all a trade. In that context and role, it needs to fulfil specific requirements that may help us to better understand why printing was taken up eventually in the Middle East. In the present paper, I would like to approach these questions through the introduction of a concept that is largely absent from most contributions to this debate: it is fitness for purpose. In the context of print as a new medium, fitness for purpose has three aspects and only if all of them are fulfilled does it present a viable proposition. They are (1) economic, (2) cultural, and (3) physiologic, all of which are interconnected. In this paper I will discuss these aspects in the above order: section two argues that Arabic typography as practised in

⁶ Schwartz 2017, 29.

Europe could not have been perceived as a desirable new technology in the Middle East and it queries the viability of printing in the Middle East before the nineteenth century. It emphasises the practical aspects that running a print shop involves, including the sourcing of equipment and trained staff, and that any *shop* ultimately must be profitable. Against this background, section three asks who pursued printing activities in the Middle East before the nineteenth century and discusses the circumstances and potential motivations of these pioneering efforts. Section four focuses on the quality of Arabic type as a key factor for the continued failure of typography to become accepted. It juxtaposes the typographic page to the manuscript page and identifies potential reasons for the shortcomings of early Arabic types. Section five continues this argument, emphasising that typography, like any other craft, is practised on a scale of accomplishment, challenging the implicit assumption in much of the literature that any Arabic typography was fit for its purpose. Section six provides a cursory digression into legibility research, arguing for an appreciation of typographic quality as a key determinant for the ease and pleasure with which a text is read, and in consequence, for the acceptance of letterpress printing in the Middle East.

2 Was it worth it?

Economic considerations of printing in the Middle East hinge on evidence from the period, and so far, little tangible information has been unearthed. In want of precise data, literature on the subject of Arabic print history often has to resort to historical texts. One such source is found in Antoine Galland's (1646–1715) introduction to Barthélemy d'Herbelot's (1625–1695) *Bibliothèque Orientale*. Galland's anecdote that a Medicean print edition of Avicenna (see Fig. 1), although priced lower than manuscript copies of the same text, remained unsold for a long time on the shelf of an Istanbul bookseller is frequently cited in the literature to demonstrate the rejection of typography.⁷ But beyond the oft-quoted dislike of Arabic print, Galland's account also framed European Oriental

⁷ Galland 1777. The contemporaneous account by the American James Mario Matra (1746–1808) relates generally prohibitive book prices. He was posted to Istanbul as a British diplomat in the 1790s, and in a letter to Sir Joseph Banks he wrote: 'As soon as I arrived here, I began to study the language of the country, and among the very many impediments I saw I must encounter, the scarcity, and extravagant price of Books was not the least: multitudes of the Natives, though very desirous of acquiring knowledge were prevented by the same cause' (quoted in Clogg 1979, 68).

publishing as a commercial endeavour. He noted that the Arabic publications of the *Typographia Medicea* could not possibly have targeted a European readership, which lacked grammars or dictionaries, making Arabic texts largely inaccessible.⁸ According to Galland, instead ‘one made this big investment in order to trade these books in the Levant, a plan that failed initially, because the Muslims did not want to take the volumes that were brought to them’.⁹ Galland pondered explanations for the disinterest of the intended readership, amongst them the alleged Muslim fear that print may desecrate the Qur’ān, and the potential loss of livelihood for countless scribes and copyists. Puzzled, he noted that Arabs, Persians, and Turks cannot stand print despite its advantages, and that they prefer reading mediocre handwriting, no matter how well the print was done.

Ironically, Galland plausibly described a miscarried commercial endeavour but could not see the central reason for its failure. Galland’s conviction of the advantage of print, and his lack of appreciation for the visual qualities of text, made the rejection of the medium incomprehensible.¹⁰ A bias that is thrown into sharp relief by the apparent facts: one could not sell printed books to Muslim readers with type that was made in Europe, and there were glaring differences between the visual quality of manuscripts and Arabic typography. Even though the publications of the *Typographia Medicea* used Arabic fonts that had been commissioned from one of the most able and renowned punchcutters of his time, the resulting typography remained unacceptable to readers who were familiar with Islamic manuscript culture.¹¹ A contemporary of Galland, the German Carsten Niebuhr (1733–1815) reported similar observations from his

8 The *Typographia Medicea* was part of the Catholic church’s propaganda effort. Conceived in 1578 by Pope Gregorio XIII as the Papal Polyglot Printing Press, from 1584 it evolved into the *Typographia Medicea* with the financial support of Cardinal Ferdinando de’ Medici. Both establishments had considerable financial and political support and sought to advance Catholic missionary activities through the making of religious publications in the native languages and scripts of the Near East and Slav countries. The most detailed account of its work in Arabic typography is found in Vervliet 2008.

9 ‘Mais, on fit cette grande dépenfe dans la vûe de faire commerce en Levant de ces Livres, deffein qui échoua d’abord, parce que les Mahometans ne voulurent pas recevoir les Exemplaires qu’on leur porta’ (Galland 1777, xxix).

10 Galland thus set a precedent for much of the contemporary scholarly debate that is largely reluctant to accept visual properties as a key determinant for the success – or failure – of typographic print.

11 Robert Granjon was a master punchcutter whose work in Latin and Greek scripts is widely regarded to rank amongst the most accomplished Renaissance types.

participation in the Danish Arabia Expedition (1761–1767). In his 1772 *Travels Through Arabia and other Countries in the East* he noted:

The hand-writing of the Arabians in the common bufinefs of life is not legible. The orientals, however, value themselves on their writing, and have carried the art of making beautiful written characters to high perfection. But the Arabians value chiefly a species of elegance, which confits in their manner of joining their letters, the want of which makes themselves diflike the ftyle in which Arabic books are printed in Europe.¹²

Thus the rejection of printed Arabic in the Middle East appears to have been well known, and Ottoman authorities, as well as potential local entrepreneurs, would have seen the commercial failure of European Arabic typography, making it an improbable role model to follow. If its products had no market in the region, why would one adopt it?

Setting the example of European productions aside, also the significant initial investments would have created a hurdle in the adoption of Arabic typography. In addition to presses, a prospective printer needed type, suitable paper, printer's ink, and various accessories. All of these investments in plant and consumables were locked until the books had been sold and could only ever be reclaimed through economies of scale. Multiplication constituted the central advantage of print over manuscript production, yet only if the books found buyers. For print to be viable, the edition had to exceed a minimal number of copies, typically a few hundred, which required a lot of paper – the most expensive consumable – and the produced volumes had to be stored too, adding to the costs.

Furthermore, sourcing the required equipment and consumables locally was difficult. Although we know of traces of a printing trade practised by minorities within the Ottoman Empire from the late fifteenth century, its extent was limited. Whilst Jewish refugees of the Catholic conquest of Spain brought their craft to Istanbul in the early 1490s, these printshops 'were largely closed from 1590 through the first three decades of the seventeenth century'.¹³ Jewish publishing resumed on a moderate scale in the mid-seventeenth century, but activities remained limited as the economic and political standing of the Ottoman Jewry weakened, and by the nineteenth century Thessaloniki had replaced Istanbul as a centre of Hebrew publishing. The estimated 809 Hebrew titles that are known to have been printed in Istanbul between 1493 and 1860 – a yield of just over two titles per year – demonstrate that this minority trade happened on

¹² Niebuhr 1792, 261.

¹³ Shaw 1991, 145.

an exceedingly modest scale, arguably too small to have had significant influence beyond its confessional boundaries.¹⁴

Armenian printing began in Istanbul as early as 1567, yet the first workshop operated a mere two years, and only in the eighteenth century the centre of Armenian printing moved from Europe to the Middle East.¹⁵ Meliné Pehlivanian identifies access to equipment and material as an important factor in the uptake of the technology in the region.¹⁶ Only once the economic situation deteriorated for Armenian publishers in Europe did they settle in Istanbul and, according to Pehlivanian, they did so because the location was beneficial for their businesses: ‘On the one hand it was close enough to Europe to make procurement of the necessary technical equipment, paper and printing ink possible, on the other hand it was close enough to the Armenian homeland to shorten significantly the transport routes to potential buyers’.¹⁷

Moreover, there was little local competence that could be used. A letterpress print shop relied on the skills of multiple specialists, including punchcutters, type founders, typesetters, and pressmen, all of whom required training. Where and how could this staff be found in an economically viable manner? From our contemporary perspective, the established workshops of religious and ethnic minorities in Istanbul again suggest themselves as a potential recruitment ground for skilled labour. Indeed, it has been reported that İbrahim Müteferrika (1674–1745) employed the help of Yonah ben Yakob Ashkenazi (d. 1745), a Polish Jewish migrant who became a central figure in the revival of Hebrew printing in the Ottoman Empire.¹⁸ He has been credited with having ‘designed and cast the Arabic letters’ used by Müteferrika, and to have ‘advised him on how the press should be operated’.¹⁹ Yet, other sources also report that his printing endeavours relied on presses imported from France and trained staff that was hired in Vienna, indicating the reliance on foreign equipment and

¹⁴ Tamari 2002, 46–47.

¹⁵ Kévorkian 2014, 123.

¹⁶ Pehlivanian 2002, 56. Pehlivanian stresses that ‘because of [Armenia’s] great distance from Europe the printers were faced with major supply problems for equipment and paper. At that time Europe alone offered the necessary prerequisites for book printing’ (Pehlivanian 2002, 55).

¹⁷ Pehlivanian 2002, 56–57.

¹⁸ Shaw 1991, 146.

¹⁹ Shaw 1991, 146.

competence.²⁰ Even paper, a consumable that formed as much part of manuscript culture as of print culture, had to be imported.²¹

This dependency had not eased by the nineteenth century either, as is apparent from the state-sponsored reconnaissance missions of *Mirzā Šāliḥ* (d. after 1841) and *Niqūlā al-Masābkī* (d. 1830) in the 1810s.²² Further to their respective apprenticeships, and studies of Western habits, concepts, and techniques, they returned to Iran and Egypt, respectively, with European hardware, destined to initiate local workshops that were modelled on Western examples. This suggests that although extant, the printing trade that was run by religious and ethnic minorities in Istanbul was unable to provide in sufficient quantities and with reliability the plant, or the staff, or the training for any aspiring Muslim printer. New ventures thus relied on imported material and equipment for the initial setup, further driving up the necessary capital investment – an investment that did not promise many, if any, returns. As Nile Green argues, the invention of the mass-produced iron hand press in 1800, and the resulting availability of second-hand presses and a steep drop in prices, played a key role in enabling the adoption of letterpress printing in the Middle East and South Asia.²³ But prior to that, when even small quantities of imported books found no buyer in the region, how could anyone have hoped to make any profits from a printing business?

Here it is worth pausing and reflecting on the pioneers of Arabic print culture in the region. For who did, against the demonstrated odds, initiate printing ventures in the Middle East before the mid-nineteenth century?

20 Duda 1935, 236. The Swedish diplomat Edvard Carleson related in a letter from 20 July 1735 that *Müteferrika* had ‘acquired some indispensable workers from Germany together with some type founders, who made the characters, so he was able to start working immediately.’ Carleson 1979, 21–26.

21 By the eighteenth century, papermaking had largely stopped across most of the Middle East. According to Bloom (2001, 216), ‘Syria, Egypt, and North Africa [...] had effectively stopped making paper and instead imported their supplies from Europe.’ A situation that was echoed in the Ottoman lands, where ‘the paper mills in Istanbul and Amasya that produced paper for the manuscript industry had long since been unable to compete with the European market and were no longer in use by the eighteenth century; thus, European merchants provided much of the paper necessary for the Ottoman manuscript and book market.’ Gencer 2010, 159.

22 *Mirzā Šāliḥ* was one of four students that the Persian Prince ‘Abbās *Mirzā* sent to England in 1815 to learn about the new sciences and technologies of the Western world. See Green 2009. In the same year, *Muḥammad ‘Alī* of Egypt dispatched *Niqūlā al-Masābkī*, a young Syrian Christian, to Italy to train as a printer and purchase printing plant to be used at the *Būlāq* press. See Ayalon 2016, 22.

23 Green 2010.

3 Who could be bothered?

Starting a print shop in the Middle East could not have appeared as a smart business idea to any Ottoman Muslim until well into the nineteenth century. The evidence available would have suggested that letterpress printing was an expensive, cumbersome, foreign technology. Moreover, as discussed above, for readers familiar with the Islamic manuscript tradition, its products were ghastly-looking, often error-ridden, and thus unsellable to the already minuscule potential market. As J.R. Osborn summarises more diplomatically, ‘early Arabic types are frequently described as “unsatisfactory,” “unrefined,” and “inelegant”’ [and] appeared “decidedly unlovely” to discerning eyes’.²⁴ Indeed, in this light Schwartz’s question may be emphasised to *why would anyone in his right mind want to print?*

To examine this further, it is necessary to reflect on the potential motivations of individual pioneers of printing in the region. Whilst necessarily relying on conjecture, focussing on what we know about the actual agents of this change – human actors, as opposed to grand civilisational concepts – may contribute to forming a more complete general picture.

3.1 İbrahim Müteferrika

No one less than İbrahim Müteferrika, the celebrated pioneer of Arabic typography, suggests himself as our starting point. Müteferrika was not a businessman, at least not from the start. When he began the preparations for his printing endeavour around the year 1719, he was in his late forties, having had a successful career as an Ottoman soldier and bureaucrat.²⁵ As early as 1713 he served as a *sipahi* in the Imperial cavalry, and by 1716 he was appointed as *müteferrika*, a high-ranking position in the Ottoman bureaucracy.²⁶ During the same year Müteferrika was dispatched on a diplomatic mission to Belgrade, and became the liaison officer to Prince Ferenc Rakoczi (1676–1735) supporting activities against the Habsburg monarchy. After the beginning of his printing activities,

²⁴ Osborn 2017, 94.

²⁵ Müteferrika appears to have moved to the Ottoman Empire in the 1690s when he was in his twenties.

²⁶ Erginbaş 2013, 64. According to Joseph von Hammer, a ‘Muteferrika Ibrahim’ was sent as an envoy to the Habsburg court as early as 1715 (Hammer 1831, 193). However, more recent research questioned if the two Ibrahims were the same person. See Afyoncu 2001, 609–612.

we know of further diplomatic voyages that took him to Salonica (1731), Poland (1736), Romania (1738), and Dagestan (1738). Furthermore, he became the scribe of the Ottoman artillery in 1738 and was appointed official Imperial historian in 1744.²⁷

In short, İbrahim Müteferrika had no need to set up a business. He was a respected and successful Ottoman official and easily lived off this activity. According to Sabev, as a *müteferrika* he earned between 300 and 360 kuruş per year, and as a liaison officer a further 600 kuruş.²⁸ To put this into perspective, we can refer to other data from Sabev's comparison of inheritance inventories. There we gather that a modest house in Istanbul was estimated to be worth 133 kuruş (in 1734), whereas Müteferrika's house was estimated at 2500 kuruş (in 1747), indicating considerable wealth: not only was his house worth 19 times that of a modest dwelling, he also earned as much in merely two and a half years, and that is prior to starting his printing activity. It therefore appears implausible that Müteferrika's motive to initiate the first Muslim printing press could have been based on economic considerations. Rather, it is likely to have been driven by loftier aspirations towards progress and modernisation, and by the emulation of European models, a recurring feature of the Tulip period.²⁹ Importantly, his comfortable economic standing meant that Müteferrika's printing enterprise did not need to create a profit, or break-even. Success indicators that would be used for a conventional business therefore do not apply fully to Müteferrika's endeavour. Whether he sold 50% or 70% of his print runs may have been only a tangential concern, if other sources of income could be relied on to cover lifestyle and subsidise the print shop.³⁰ Moreover, the trickle of books that were produced during Müteferrika's lifetime, in combination with known biographical details of his continued diplomatic career, suggest that for him printing was a leisure activity, not a necessity.³¹ Seventeen publications over the course of twenty-four years is a meagre output by itself, and the selection

²⁷ Erginbaş 2013, 65–66.

²⁸ Sabev 2009, 185.

²⁹ A parallel has been identified by Sebouh Aslanian in the emergence of Armenian printing activities. He notes that profit motives were the exception in the history of the Armenian book, and that the small reading market and literacy rates precluded pursuing printing as a capitalist enterprise. Instead, sponsors supported printing presses 'as a form of cultural patronage for both Church and "nation"' (Aslanian 2014, 60).

³⁰ At the beginning and for the initial establishment of the print shop Müteferrika also enjoyed the financial support of Said Effendi, another high-ranking Ottoman official.

³¹ Books published per year: 1729 (3), 1730 (5), 1731 (0), 1732 (3), 1733 (1), 1734 (1), 1735–40 (0), 1741 (2), 1742 (1).