PAPER BEFORE PRINT
The History and Impact of Paper in the Islamic World
Jonathan M. Bloom
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The HISTORY AND IMPACT OF PAPER in the ISLAMIC WORLD

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In the Middle Ages, paper—a material now so common that it is taken for granted—transformed the ways that people living in West Asia and North Africa thought and worked. It became the prime medium of memory. I have spent my professional life studying and writing about the history of art and architecture in the Islamic lands, but I was suddenly confronted with the complex relation between memory and the written record about ten years ago, when my two-year-old daughter came downstairs one morning and asked why various objects, such as the sugar bowl and the pepper mill, were in different places on the kitchen shelf than they had been the night before. I realized that she noticed exactly where things were because she believed it an important thing to know and that she had no other way of recording this information: she was a preliterate child. Adults know that the position of the sugar bowl is normally irrelevant; and were it relevant, they know, if they are literate, they can record the information. Illiterate adults often have prodigious memories, but learning to read and write seems to destroy the inclination or capacity to remember. It seemed to me then—and still seems to me—that much in the history of Islamic civilization in the Middle Ages, between 600 and 1500, can be seen in terms of the conflicting claims of memory and the written record; the triumph of notation—whether written or drawn—came with paper. Although I subsequently discovered that these concepts have interested several historians of European civilization, only a few scholars have begun to apply them to Islamic civilization.

This book deals with Islamic history and visual culture in the premodern period, but the more general questions with which it is concerned are central to the development of modern Western culture—namely, the media by which ideas are transferred and the transition from memory to notation. Western historians like M. T. Clanchy and Lucien Febvre and Henri-Jean Martin have explored the transition from memory to notation in medieval and postmedieval Europe, examining, for example, how traditional methods of mental recordkeeping were replaced by account books, deeds, and charters, or
how the printing press spurred a typographical revolution, exposing a swath of society to the written word for the first time. In the Islamic lands, the great time lapse between the introduction of paper and the introduction of printing reveals for the first time how important the medium of paper itself was in this giant step in human history. Many of the ideas discussed in the following pages have long been known to specialists, but they have never been brought together before. Many of my predecessors have seen the trees, but few, apart from the prescient Alfred von Kremer, whose words open this book, have seen the forest.

In this book I bridge several disciplines. Because the histories of paper in China and Europe are relatively accessible to the general reader, I have concentrated on revealing the exciting story of paper before print in the Islamic lands. To do so requires stringing together miscellaneous facts into a coherent narrative. Marshall G. S. Hodgson, the great American historian of Islamic civilization, noted that medieval Muslim historians focused their attention not on cultural developments but on the responsible acts of individuals. Consequently the sources ignore many of the very questions that interest the contemporary cultural historian, such as the introduction and diffusion of technology. The historian must connect the dots established by the occasional remark in a medieval text or the evidence in the often incomplete archaeological and artistic records. Only infrequently does the available evidence lead to a story as straightforward or clear as the researcher might like. Paper is no longer made in many of the regions discussed in this book, and the only evidence for how a particular sheet of paper was made is the usually ambiguous testimony of the paper itself.

In the interests of telling the tale, I may have tweaked circumstantial evidence in my favor. As a historian, I believe that my explanation of the invention, diffusion, and development of paper best serves the evidence I have found, but I also admit that other explanations are possible, if less probable. At the very least, I hope my explanation challenges others to come forth with other evidence and answers. I also trust that historians of paper, Islam and Islamic art will excuse my sometimes sweeping generalizations for the sake of making this arcane but important subject accessible to a wide audience.

In writing this book for a general audience, I have tried to avoid many of the conventions that scholars normally use when writing for each other about the history of the Islamic lands of West Asia and North Africa. For example, I have used a simplified system to transcribe words taken from Arabic, Persian, and Turkish, giving common English equivalents wherever possible and avoiding special characters, except in the list of works cited at the end of the book. Those who know these languages will appreciate what I have done to avoid
frightening those who don’t, and those who don’t, won’t care. For simplicity’s sake I have referred to the regions of West Asia and North Africa—such as Iran, Egypt, Morocco—by their modern names, although virtually all are creations of the twentieth century, and their current borders are more restrictive than their borders in the past.

I have also given all dates according to the Common Era (B.C.E. and C.E., instead of B.C. and A.D.). Muslims used a lunar calendar that does not correspond exactly to the solar calendar used elsewhere; hence, some brief events dated on the basis of their calendar may appear to straddle two Western-calendar years. When I have occasionally been unable to precisely date some historical process, I have used the convention of dynastic dating by referring to the Umayyad (661–750) and Abbasid (749–1258) periods.

I have lightly edited some quotations and translations to improve the sense without, I trust, any substantive change of meaning. To help the reader enjoy the flow of my argument, I have also replaced potential footnotes and endnotes with a bibliographical essay and complete list of works cited, to be found at the end of the book. Discussion of specialized topics, such as the physics and chemistry of paper or the operation of the Hollander beater, will be found in a series of sidebars placed appropriately throughout the chapters.

I can trace my interest in paper and papermaking to my childhood in the 1950s, when I watched a science television program for children called Watch Mr. Wizard. Mr. Wizard explained how paper was made and showed how you could make paper by dissolving toilet paper in a basin of water and collecting the pulp on a small piece of wire screening. Growing up in a cramped New York City apartment, I had to make do. After dissolving half a roll of toilet paper in the bathroom sink and catching most of the sludgy mess on a window screen, I placed the screen precariously on a radiator to dry, where it promptly fell into the dust between the radiator and the wall. The drain of the bathroom sink was clogged, and I had to explain my scientific experiment first to displeased parents and then to an unsympathetic building superintendent. Not until years later did I rediscover the missing window screen and the moldy remains of my papermaking experiment. Nor did I even remember this youthful experiment until I began to learn exactly how paper was made.

Even after spending several years researching and writing this book, my interest in the history of paper has not waned. I have been gratified to discover that other scholars are working on similar and related problems, and I trust that this book will not be my last word on the subject as our knowledge of the history of paper deepens and grows.

Many institutions and individuals have helped bring this book to fruition.
An initial travel grant from the American Council of Learned Societies allowed me to present my work at a conference in Edinburgh. An Andrew W. Mellon Senior Research Fellowship from the Metropolitan Museum of Art in New York gave me the luxury of working with medieval papers for six months, as well as talking and working alongside conservators and curators. Among the staff at the Metropolitan Museum, Sarah Bertalan, Stefano Carboni, Marjorie Shelley, and Daniel Walker deserve special thanks for taking the time to shepherd a novice through the marvels of their treasurehouse. Karen Sack’s boundless hospitality made it possible to explore the delights of the Big Apple. In Washington, D.C., Massumeh Farhad and Martha Smith of the Freer Gallery of Art and Sackler Museum, Smithsonian Institution, were generous with their time and expertise, as were Alan and Lois Fern with their hospitality. David Wise of the National Endowment for the Humanities, a federal agency, encouraged me to persist with my project, and the generous NEH fellowship for Independent Research allowed me to spend an entire year finishing the text. Geoffrey Verney, Jr., graciously escorted me through Monadnock Paper Mills and lent me several specialist books from his collection. Stefan Reif of the Taylor-Schechter Research Unit at the Cambridge University Library let me lay my hands (ever so gingerly) on Geniza documents in his care. The Center for Middle Eastern Studies at Harvard University generously made the incomparable riches of the Harvard University Library available to an independent scholar. Publication of this book was helped by a generous grant from the Norma Jean Calderwood University Professorship support fund at Boston College.


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The Spread of Paper and Papermaking