With the Umayyads, al-Andalus became a separate political entity. They developed distinctive conditions as to sedentary culture, the crafts, and writing styles. As a result, their Andalusi script, as it is known today, also became special.

Finally, several useful appendices complete the volume, namely a list of the manuscripts considered, the works they contain, the copyists, the places where the manuscripts were copied, and remarkable colophons and notes, as well as an extremely useful glossary containing the codicological terms employed throughout the book. If I had to find one fault, it might be that the index of copied works is organized alphabetically by genre (*Adab and Botany*; *Adab and Meteorology* ...), whereas perhaps it would have been more practical to organize them simply by title, indicating the genre at the end. However, this probably responds to Bongianino's aim of linking the diverse genres to one or another variety of script.

This monograph on the manuscript tradition of the Islamic West is an invaluable contribution to the field of Islamic intellectual and cultural history. By focusing not just on the content of the texts, but also (and mainly) on the material aspects of the artefacts wherein those texts were copied, Bongianino provides the reader with a framework that allows for a better understanding of the written production, and of the way in which those works were written, read, transmitted, taught, and preserved – a relatively overlooked aspect in the history of the Muslim communities of this geographic area. In brief, this publication will surely become a definitive reference work in the field, preparing the ground for future research.

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## Nadine Schibille: Islamic Glass in the Making: Chronological and Geographical Dimensions

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This is a critical evaluation and (re)interpretation of analytical data of archaeological glass finds from different time periods and geographical regions of the early Islamic world. It significantly advances our understanding of the early Islamic glassmaking industry. Its main aim is to establish geo-chronological compositional markers to distinguish different production groups, and provide insights into the manufacture and circulation of glass in the early Islamic world. It achieves this through the examination of assemblages from early Islamic Egypt, Syria, Mesopotamia, and Spain and by tying the compositional data to the broader socio-economic context. The result is a journey through the different processes that over the centuries shaped an Islamic glassmaking tradition, its interconnectivity, but also its internal divisions and regional peculiarities. Schibille is a senior research scientist at the CNRS and has published extensively on many of the materials discussed in the text, and this work reads in many ways as a synthesis of this very often collaborative work.



Schibille's prologue introduces the aim of the book, outlines the assumptions on which the methodological approach is based and provides a short overview of the structure of the book. Chapter 1, "Islamic glassmaking in Egypt contingent on local administration", discusses the composition of Egyptian glass and its transformation from the Roman to early Islamic periods. The chapter first presents a very useful overview of the archaeological evidence for the primary production of glass in Egypt during the Hellenistic and Roman periods, which paves the way for a detailed review of the Roman and late antique Egyptian compositional groups and their distribution throughout the eastern and western Mediterranean. The development of the Islamic glass industry in Egypt is explored entirely through the chemical composition of Islamic glass coin weights dated between the seventh and twelfth centuries (they frequently bear the names of Egyptian officials), and recently analysed by the author and colleagues. Compositional changes through this period are linked to changes in the local administration and government, notably the impact of the dissolution of the Abbasid caliphate on the natron glass industry in the late ninth century and the rise of the plant ash glass one during the Fatimid period. However, to what extent the variations traced in the glass weights are representative of the whole Egyptian glass industry is difficult to say, as the author points out. Moreover, her conclusions rely heavily on archaeological objects coming from collections rather than from archaeological excavations, and while the dating of these glass coins is fairly robust, she is less willing to concede that the provenance might be less certain.

Chapter 2, "Islamic glassmaking in Greater Syria (Bilaâd al-Shâm): distribution patterns", evaluates the changes in terms of production and supply of glass in Greater Syria. The compositional groups examined here range from the natron Roman and late antique Levantine groups to the Islamic plant ash glass groups of the tenth–eleventh century. As such, there is not much revisionism of the current understanding of glassmaking in the area on Schibille's part. The author's focus is the relationship of Greater Syria with other production centres, notably with Egypt. Schibille's data corroborates the impression that the main source of raw glass supply in the eighth century was Egypt, as suggested by the predominance of Egyptian glass groups in the mosaic tesserae from Damascus and Khirbat al-Minya. The flow of materials is then assessed in light of the most recent evidence on plant ash glass production in the area from about the ninth century: the outcome is a clever reconstruction of patterns of glass trade, which this time had at their centre the revival of the Levantine glassmaking industry.

Chapter 3, "Glass production in Mesopotamia: preservation of plant ash recipes", provides a preliminary perspective on Mesopotamian and Central Asian glass, focusing on elements of continuity between the earlier Sasanian and Mesopotamian traditions, while trying to define compositional markers which allow us to distinguish between a strict Mesopotamian and Central Asian production. The author discusses both legacy and unpublished data. For Sasanian glass this includes the well-known glass from Veh Ardašīr compared with new data on glass from Ctesiphon as well as unpublished data on Merovingian glass beads, while for Mesopotamian and Central Asian glass the assemblages discussed are those from al-Raqqa, Samarra, Siraf, as well as new data on glass from Merv. There is clear evidence for the production of a specific compositional type of Mesopotamian glass as well as for regional variations in the technology and raw materials used for glassmaking in Mesopotamia and Central Asia. Schibille comes to important conclusions even concerning the flow of glass along the Silk Roads, with all the available evidence pointing to a movement from west to east. Particularly interesting is the section on the possible existence of a specialized Mesopotamian production of high-quality colourless glass, which was used to manufacture luxury glass such as facet-cut vessels and which appears to have travelled over very long distances.

Chapter 4, "From Polis to Madina and the flux of glass in Spain", addresses a fundamental gap in the study of ancient glassmaking, as it focuses on the study of medieval glass from the little-explored Iberian Peninsula and notably on the impact that the Umayyad conquest of

the Peninsula had on the flux used in glassmaking and on the development of a local Andalusian glassmaking tradition. The chapter is without doubt the most interesting and fascinating section of the whole book, for it provides a fruitful diachronic analysis of the technological developments and changes in supply patterns of the Iberian Peninsula from the late Roman period to the eleventh-twelfth century. The discussion encompasses data on various glass assemblages including the material from the ninth-century workshop in Pechina, from several sites in Córdoba dated between the eighth and tenth centuries, as well as a brief comparison with some later finds from Ciudad de Vascos and Albalat (tenth-twelfth century). The most interesting and illuminating conclusion is the evidence for the development of a new Andalusian glassmaking technology based on the use of local lead slag from silver or lead mines, as the analysis of eighth- or ninth-century glass from Sagunda surprisingly demonstrates. This technology seems to have paved the way for an even more advanced Andalusian glass production which exploited litharge instead of lead slag, as exemplified by the comprehensive tenth-century assemblage from Madinat al-Zahra, and resulting in a clearer and probably more easily workable soda ash lead glass. Schibille uses not only the analytical evidence but cites the written record which claims the invention of a "new glass" in al-Andalus in the tenth century. Compositional discriminants for later Iberian plant ash glass are also suggested, particularly elevated lithium concentrations, combined with high thorium to zirconium ratios.

While the nature of this research still feels preliminary at points and certainly in need of additional analytical data which will target some of the specific insights suggested by the author, this is without doubt a very comprehensive and useful study of glass production and supply during the early Islamic period. Its scope will mainly assist scholars interested in the compositional study of Islamic glass, but it will prove helpful for scholars in the broader fields of archaeology and history, as it seeks out fruitful links between different sub-disciplines. In this respect, the link with the archaeology – and not just the history – of the different regions investigated is sometimes lost or discussed only superficially, and a closer connection between compositional and archaeological studies may have provided even more informative insights into the subject. Nevertheless, this book offers a very useful starting point for anyone wishing to study Islamic glass and willing to explore the geopolitical trends that impacted its production and trade.

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## Hannā Diyāb: Kitāb al-Siyāḥah (The Book of Travels)

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Hannā Diyāb, a Maronite from Aleppo who lived from approximately 1687 until after 1764, has gained increased fame in recent decades. It is now known that he was the source for a