WORKING PAPER (September 2007)

A 'Paper Economy of Faith' without Faith in Paper: A Contribution to Understanding the Roots of Islamic Institutional Stagnation

Ghislaine Lydon (UCLA)*

The growth of the paper industry and the cheapening in paper has had a more profound effect upon the community than the invention of the steam train.¹

The Commander of the Faithful, may God protect him, has taken a position...that it is absolutely necessary in the reliance upon writing to have knowledge of its writer and his character and his justness; and of the fact that the writing to be relied upon is his writing; or to have knowledge that the writing in question is well known among the old writings for which there is no suspicion of falsehood and forgery...For the practitioners of forgery are skilled in imitation and cleverness in rendering documents for presentation and copying them in the guise of scripts of individuals who can be trusted. What is required is an examination of the script...This is what accords with the spirit of the *shari* 'a, and what is called for to maintain order and to protect civilization.²

One of the most remarkable facts about the history of Muslim societies is the extent to which, since the birth of the religion of Islam in the seventh century, Muslims have placed great emphasis on Arabic literacy and on recording civil and economic transactions in writing. At the same time, intellectual traditions of Islamic learning led to great advances in science and technology that spread across the Mediterranean to influence the course of history in Europe, Asia and elsewhere. Yet it is somewhat of a paradox that while literate Muslims followed to the letter the religious recommendation to commit their contractual agreements to writing, specialists of Islamic legal traditions did not consider such documents to be legally binding in a court of law. Indeed, that Islamic law primed oral testimony over written evidence, a fact that has hardly

^{*} I thank Jan Luiten Van Zanden for suggesting that I write this paper and for his comments. I also thank the Economic History Group at Utrecht University for their hospitality in a most stimulating scholarly environment where some of the thoughts expressed in this paper took shape. I am also grateful to Naomi Lamoreaux Ahmed Alwishah and Oscar Gelderblom for hearing me-out on some of these ideas. Special thank to Timur Kuran and Richard Swedberg for their valuable comments and to the *Institute for Economic Research on Civilizations* for hosting a conference in 02/07 where this paper was first presented.

¹ A. Dykes Spicer, *The Paper Trade: A Descriptive and Historical Survey of the Paper Trade From the Commencement of the Nineteenth Century* (London: Methen & Co., 1907), 1-2.

² Imam Yahya Hamid al-Din, quoted in Brinkley Messick, *The Calligraphic State. Textual Domination and History in a Muslim Society* (Berkeley: California University Press, 1993), 214-5.

drawn the attention of scholars of Muslim societies, may well be a significant factor in explaining why economic institutions in the Muslim world ultimately fell behind those of Western Europe.

Institutions or "the structure that human beings impose on human interaction," shape economic performance, as was established by the seminal work of Douglass North.³ He was equally concerned with "explaining the evolution of institutional frameworks that induce economic stagnation."⁴ By examining the incentives of individuals to engage in cooperative behavior North underscored how formal rules and informal constraints lead to more efficient economic outcomes. An efficient institutional framework is one that reduces the cost of transacting, including access to information and enforcement of contractual agreements. Ron Harris demonstrated empirically how the dynamic interplay between legal and economic institutions is fundamental to understanding the history of industrializing England.⁵ Moreover, Jean Ensminger and Timur Kuran have shown how an institutional approach is extremely relevant to the economic history of Muslim societies.⁶

However, the theory of institutions arguably has tended to take for granted one of the most basic of all transaction costs: the cost of paper together with the cost of legalizing documentation or investing faith in paper. The extent to which literacy and the use of writing-paper for the purposes of accounting (record-keeping) and accountability (enforcement), are endogenous factors favoring institutional efficiency hardly has been appreciated in the institutional economics literature.⁷ More importantly, historians have failed to recognize a seemingly critical "stage" in the passage from pre-modern to modern economic systems which is the transition from legal systems based on oral testimony to ones reliant on written evidence.

³ North, "A Revolution in Economic," in Claude Ménard, ed., *Institutions, Contracts and Organizations: Perspectives from New Institutional Economics* (Cheltenham, UK, 2000), 37.

⁴ North, *Institutions, Institutional Change and Economic Performance* (Cambridge, Cambridge University Press, 1990), vii.

⁵ Ron Harris, "The Encounters of Economic History and Legal History." *The Law and History Review* 21:2 (2003), 1-35; *Industrializing English Law: Entrepreneurship and Business Organization*, *1722-1844* (Cambridge: Cambridge University Press, 2000), 2.

⁶ Jean Ensminger. *Making a Market, the Institutional Transformation of an African Society* (Cambridge: Cambridge University Press, 1992) and Timur Kuran, "The Islamic Commercial Crisis: Institutional Roots of Economic Underdevelopment in the Middle East." *Journal of Economic History*, vol. 63, no. 2 (2003), 414-46; "Why the Middle East is Economically Underdeveloped: Historical Mechanisms of Institutional Stagnation." *Journal of Economic Perspectives*, 18 (2004), 71-90.

⁷ Stanley L. Engelman, Stephen H. Haber and Kenneth L. Sokoloff, "Inequality, Institutions and Differential Paths of Growth among New World Economies," in Claude Ménard, ed., *Institutions, Contracts and Organizations: Perspectives from New Institutional Economics* (Cheltenham, UK, 2000), 37.124-7 have incorporated literacy rates in their seminal contribution to understanding the roots of inequality in Latin America.

This epistolary shift from oral evidence to written documentation, or the replacement of *ars dictaminis* with *ars notaria*, was actuated by the institutional innovation of officially licensed notaries who dispensed of the inefficient use of witnesses for validating written documentation, such as commercial contracts between principle and agent.

In his pioneering scholarship on 'the Great Divergence" of Islamic institutions, Kuran has compellingly argued that the institutional stagnation of Muslim economies was caused by three fundamental problems: (1) the Islamic inheritance law that impeded intergenerational transfer of capital accumulation and the longevity of business organizations; (2) the lack of a legal personality in Islamic law that prevented the formation of complex enterprise such as corporations; and (3) the limitations of the *waqf* or Islamic foundation system that allowed for perpetual ownership of mainly non-productive entities such as mosques.⁸

This paper seeks to contribute to this debate by examining another dimension of Islamic legal practice that may have further prevented economic growth in the Muslim world. In particular, I argue that Islamic legal experts' lack of faith in paper, the inefficiency of oral testimony for authenticating legal paperwork, and the ensuing nonexistence of a public notary system contributed to institutional stagnation in predominantly Muslim societies. The absence of a class of what I call "legal-service providers" such as notaries public with official power of attorney to certify contracts, no longer authenticated by witnesses, contributed markedly to institutional inefficiency. For not only did the reliance on witnesses render litigation costly, it also limited the shelf-life of paperwork. That a written document, such as a contract, had no legal validity without the oral testimony of those who witnessed the transaction and could swear to its authenticity reduced the size, scope and endurance of partnerships and capital accumulation in the long-run.

Alongside the fundamental problems identified by Kuran, the lack of paper proof may contribute to understanding why Muslim market economies were prevented from developing large-scale enterprise and impersonal exchange, or from adopting the institutional innovations of the West. Indeed, unlike Western European regions, starting with coastal city-states of modernday Italy, then the Dutch Republic and England, Islamic legal institutions never experienced an

⁸ Timur Kuran, "The Islamic Commercial Crisis: Institutional Roots of Economic Underdevelopment in the Middle East." *Journal of Economic History*, vol. 63, no. 2 (2003); "Why the Middle East is Economically Underdeveloped: Historical Mechanisms of Institutional Stagnation." *Journal of Economic Perspectives*, 18 (2004), 71-90. 414-46; "The Absence of the Corporation in Islamic Law: Origins and Persistence." *American Journal of Comparative Law*, vol. 53, no. 4 (2005), 785-834.

epistemological transition from oral testimony to written documentary evidence and paper tender as a basis for legal proof. That this shift from oral to written evidence in legal practice for the most part did not fully take place in the Muslim world until after the colonial period, is all the more incongruous when considering that literacy and writing were less widespread in rural England in the early modern period than in certain oases of fifteenth-century Sahara.⁹

The history of trans-Saharan trade in western Africa is a perfect setting to study Islamic institutional stagnation. Beyond stereotypes about simple nomads navigating the empty desert, the Sahara region was highly literate and boasted sophisticated centers of Islamic learning, starting with the legendary city of Timbuktu, that were known throughout the Muslim world for the production of scholarship as well as for their specialization in the gold and slave trades. For the historian of long-distance trade and institutional economics this region that remained largely outside the control of an overarching state from the late sixteenth and until the early twentieth century, offers an excellent prism through which to examine institutional history. Like in most Muslim Africa, Muslims in this region followed the tradition of Mālikī law, one of the four Islamic legal schools in Sunni Islam. By relying on Arabic literacy and Islamic law as an institutional framework, Muslim trans-Saharan traders operated in what I have termed a "paper economy of faith." In the course of the nineteenth-century, the volume of trans-Saharan traffic between North and West Africa increased significantly, and it is in this period that caravans would transport ever larger amounts of writing paper into Western Africa.

Before turning to a discussion of Islamic law, and the function of documents in Islamic legal theory and its practice in North and West African history, I set the context by giving an overview of the paper trade in Africa. Then, based on commercial and legal records collected in private libraries in Mauritania and Mali, documenting the activities of nineteenth century Muslim trans-Saharan commercial entrepreneurs, I examine their reliance on paper in the organization of caravan trade and the role of legal-service providers in mediation and enforcement. From a selection of legal opinions or *fatwas*, I show how the Islamic legal practice of invalidating written documentation as evidence in a court of law was enforced in the Maghrib and West Africa in order to demonstrate the fundamental limitations for economic development of Islamic institutions. I end the paper by reflecting upon the transformation to paper-proof in Western

⁹ Nelly Hanna, "Literacy and the "Great Divide" in the Islamic World." *Journal of Global History*. 2:2 (2007), 175-193

Europe, and the critical role of notaries public as legal and financial intermediaries enabling the certification of paperwork, from contracts to deeds, which served to promote the transition to impersonal market economies.

The Paper Trade to Africa

The growth in the demand for paper in world history may be more attributable to the spread of literacy than the tradition of parcel-wrapping. Developed in Ancient Egypt, papyrus was the earliest form of paper used by Muslims, and some of their eighth century writings have survived. Like other literate societies, Muslims also used leather parchments, but this was not the preferred recording medium, especially in the age of paper. While writing paper originated from China, its use was first adopted in the Middle East and Africa before extending to Europe.¹⁰ Concurrently, the technology of papermaking would have spread from China to Iraq, Syria and Iran, before reaching Egypt, the Maghrib (Northwest Africa) and later Spain.¹¹ By the eleventh century, when the Almoravid *jihad* would have spilled over into Spain from the southern coasts of the western Sahara, it is said that there were over one hundred paper mills in the Moroccan city of Fez manufacturing paper from linen and hemp.¹² At this time paper from these mills was exported to the Balearic Islands and to the Italian peninsula, where eventually the port of Amalfi would assume an important position in paper production. By the fourteenth century the best quality paper was produced in Spain at Shāţiba (or Jativa), but soon the regions of southern France and Italy would take the lead in paper production and exportation.¹³

Subsequently, and especially from the seventeenth century onwards, Venice, Genoa and Marseilles became the most important ports supplying North African markets in paper, starting with Cairo. Writing paper of "Italian" and French origin would dominate the paper market across

¹⁰ Fernand Braudel, *The Structures of Everyday Life: Civilization and Capitalism 15th-18th Century*, Volume 1 (New York: Harper & Row, Publishers, 1979), 397-9.

¹¹ Jonathan Bloom, *Paper Before Print: The History and Impact of Paper in the Islamic World* (New Haven: Yale University Press, 2001). See also Robert I. Burns, *Society and Documentation in Crusader Valencia* (Princeton University Press, 1985) especially chapters 23 "The Paper Revolution," and 24 "Paper: Jativa and the Archives."

¹² Latifa Benjelloun-Laroui, *Les Bibliothèques du Maroc* (Paris: Editions Maisonneuve et Larose, 1990), 23.

¹³ Encyclopedia of Islam (Leiden: Brill, 2002)); hereafter EI. "Shāțiba" (Entry IX 362b). See Burns, "Paper comes to the West, 800-1400." Europaische Technik Im Mittelalter 800 bis 1400 Tradition und Innovation, Uta Lindgren, ed. (Berlin: Gebr. Mann Verlag, 1996), 413-422. I thank Bas van Bavel for alerting me to the importance of Amalfi for paper production in early modern Europe.

the Mediterranean and into the heart of Africa.¹⁴ It would be at a comparatively much later date that places like England would begin producing paper, "an indispensable ingredient in every industrial and commercial process," as A. Dykes Spicer recognized a hundred years ago.¹⁵ Oddly, the first British paper mill is dated as late as 1498, but it was only starting in the seventeenth century, and especially the first decades of the nineteenth century, that one can talk about a papermaking industry in England.¹⁶ It developed as a result of changes implemented in manufacturing, including a shift in materials from cloth rags to espargo grass and wood-pulp, the use of chlorine bleach, and the adoption of the 'Hollander' and then progressively more sophisticated labor-saving machinery. By the 1870s, England would join France and Italy as the leading exporters of writing paper to the four corners of the world. Interestingly, from the 1860s to as late as 1907, "Algiers, Tripoli, North Africa and Almeria in Spain [were England's] chief sources of espargo production" which was then the principle material used in papermaking and would contribute to significantly lowering the price of paper.¹⁷

Naturally, Muslim societies consumed, produced and imported writing paper since Arabic literacy was a quintessential trait of Islamic practice. From the early centuries of Islam, as Jonathan Bloom has shown, "books and book knowledge became the aim of Islamic society."¹⁸ Experiencing the fastest conversion rate of any religion in world history, Islam was the majority religion in most of the Middle East, North Africa and Spain by the eleventh century. Its pedagogical message, the teaching of Arabic writing and Islamic theology, became the religious duty of Muslims to the point that schooling became institutionalized as a function of mosques. This literary world was sustained thanks to the entrepreneurial activities of Muslims and their promotion of homegrown industries of manuscript-copying and bookbinding. Ironically, Muslims would long resist the industrialization of manuscript production by failing to adopt the printing press for centuries after it was in use in most Western and Asian literate societies. While

¹⁴ Terrence Walz, "The Paper Trade of Egypt and the Sudan," in M. W. Daly, ed., *Modernization in the Sudan* (New York, 1985). 29-48.

¹⁵ Dykes Spicer, *Paper Trade*, 1-2.

¹⁶ The subject of the paper industry is clearly an understudied chapter of British history. Dykes Spicer's *Paper Trade* is the best economic history to date dealing with the nineteenth century. This was the first historian, to my knowledge, to recognize the importance of technology of paper when stating "if the manufacture of paper were proportional to the importance of paper in modern life, it would be the largest industry in Great Britain." (1). For a short history that addresses the pre-nineteenth-century period, see D.C. Coleman, "Combinations of Capital and of Labour in the English Paper Industry, 1786-1825." *Economica*, vol 21, no. 81 (Feb. 1954), 32-53.

¹⁷ Dykes Spicer, *Paper Trade*, 34-5, 89.

¹⁸ Bloom, *Paper before Print*, 111.

block printing was practiced in various Muslim cities, it was not until the early eighteenth century that the first printing press with Arabic typeset was created in Syria. Only then did the Ottomans, after banning the use of Gutenburg's revolutionary invention for decades, began operating printing presses out of Istanbul. While other Ottoman-controlled cities would follow suite, it would take over a century, not until 1846, that the first printing press went into service in Morocco (which was not a part of the Ottoman Empire).

Writing paper first produced in North Africa but later mainly from Europe, circulated into western Africa by way of caravan trade.¹⁹ It also was imported via eastern trade routes from the Middle East and as far away as the Indian peninsula through long-distance trade networks.²⁰ Indeed, since the sixteenth century, India had become one of the most important paper producing and exporting economy in South Asia. Prior to the nineteenth century, literate West African Muslims dependent on caravan traffic from North Africa and also the arrival of pilgrims returning from the Hijāz by way of Cairo for their paper supplies. By the eighteenth century, French and other European maritime traders were importing writing paper into Mogador (Essaouira), the southernmost port controlled by the Moroccan Sultan, and into Saint-Louis (Ndar) the French-controlled port in Senegal. On the other side of the continent, Tripoli and Cairo were the most important North African ports of entry for industrially manufactured writing paper. In the year 1891 (1309 hijra) a caravan left Tripoli with 19 of its total of 81 camels loaded with writing paper (kāghat) that gives a sense of the weight of paper in trans-Saharan trade in this time.²¹ The caravan was on its way to the southern Libyan market of Ghāt, from where its loads would be distributed to markets as far south as Timbuktu. Given its position as a major market at the crossroads of both western and eastern trans-Saharan trade routes, Timbuktu was the earliest distribution center for paper in West Africa. By the late eighteenth century, African

¹⁹ For a discussion of the significance of the paper trade to the Saharan Islamic scholarship see Lydon, "Inkwells of the Sahara: Reflections on the Transmission of Islamic Knowledge in *Bilād al-Shinqīț*." In Scott Reese, ed. *The Transmission of Knowledge in Islamic Africa* (Brill, 2004).

²⁰ See N. Tapiéro, "A Propos d'une Manuscrit Arabe, d'Origine Soudanaise Déposé à la Bibliothèque Nationale de Paris." *Research Bulletin* (Centre of Arabic Documentation, University of Ibadan), vol. 4, Dec. 1968, pp. 26-40. This author examines watermarks on the paper of a manuscript written by early nineteenth-century jihad leader from Northern Nigeria, the Sufi Uthman Dan Fodio (his work entitled *Shams al-Ikhwān* or the sun of the brotherhood) to determine its northern Italian provenance (30). Interview in TIshīt (Mauritania) with Muḥammad wuld Aḥamdi (04/21/97) who confirmed information on the provenance of paper in the history of West Africa.

²¹ Inheritance Document, Family Library of Al-Hājj Ibrāhīm al-Anṣārī (Ghāt, Libya).

Muslim traders were purchasing writing paper in outposts along the Senegal and Gambia rivers supplied by French and British commercial intermediaries. Ironically European commerce was mainly interested exchanging miscellaneous bundles of goods in exchange for gum Arabic, a key ingredient in industrial Europe, used as a solvent in the textile industry and industrial printing, but also as an adhesive in bookbinding.

In the course of the nineteenth century, when paper was more readily available and Arabic literacy was widespread, proportionally more trans-Saharan traders than in the past recorded in writing their business transactions. At the same time that the volume of trans-Saharan trade would have increased, the nineteenth century witnessed a veritable boom in the production of Islamic knowledge in western Africa. Muslim intellectuals and scholars of Islamic law and literature doubled as merchants of trans-Saharan trade to sustain their livelihoods as well as to quench their thirst for knowledge by acquiring valuable manuscripts and writing paper. The case of a Saharan pilgrim returning from Mecca via Cairo with four camel-loads of books in the 1840s was common. Twenty years later, a Saharan scholar from present-day southwestern Mauritania returned from a book-buying spree in Morocco with over 200 manuscripts.²²

The following tables, based on information compiled by historian Yahya ould El-Bara, give a sense of the production of legal literature in northwest Africa from the fifteenth to the twentieth century.²³ Manifestly, the access to more affordable paper led to an explosion of fatwa writing at the hand of Muslim jurists or *muftīs* in what is today Mali, Mauritania, Southern Morocco/Western Sahara and Senegal.

²² See Lydon, "Inkwells."

²³ Yahya Ould El-Bara, *Majmū 'āt al-Kubrāfī Fatāwā wa Nawāzil Ahl Gharb wa Janūb Gharb al-Saḥra'* (Rabat, forthcoming). This is a monumental study in nine volumes containing 5,000 fatwas from Mali, Senegal, Mauritania the Western Sahara and Morocco dating from the fifteenth to the twentieth century. I thank El-Bara for sharing a copy of this very important collection.

Collections in North and Western Africa				
Century	Muftis	Fatwa Collections		
15 th c.	06	03		
16 th c.	12	06		
17 th c.	43	33		
18 th c.	68	59		
19 th c.	285	207		
20 th c.	214	209		
Total:	628	517		
- 25	المقدم لتلجيد	الاستعماد كالعقراء والماسلح مطاوره		

Table 1: Number of Muftis and their Fatwa

Table 2: Regional Distribution in North-WestAfrica of Fatwa Collections and Muftis

Century	East	Center	North	SW	Total
15 th c.	4	_	2	_	6
16 th c.	6	1	3	2	12
17 th c.	26	1	5	11	43
18 th c.	15	6	8	39	68
19 th c.	61	23	27	174	285
20 th c.	89	40	6	79	214
Muftis	201	71	51	305	628

A Paper Economy of Faith: Literacy and Trans-Saharan Trade

Many scholars contend that little if any technological change occurred in the organization of caravan transportation since the introduction of the camel in the early centuries of the first millennium.²⁴ Because these scholars did not have access to Arabic source material, they were not in a position to recognize how literacy and legal institutions promoted efficiencies in caravanning.²⁵ Indeed, just like literacy in Hebrew, religious codes of law based on the Torah, the Mishna and the Talmud, and legal enforcement mechanisms gave Jews a comparative advantage in economic efficiency, as Maristella Botticini and Zvi Eckstein have argued, so too did similar institutions favor Muslim entrepreneurship.²⁶ But aside from the translations of Mohamed Ennaji and Paul Pascon of nineteenth century trade records from Morocco's market of Illigh, Ulrich Harmann's article based on a careful reading of the published records of nineteenth

²⁴ Richard Bulliet, *The Camel and the Wheel* (New York: Columbia University Press, 1990), Chapter 1; Ralph Austen "Marginalization, Stagnation and Growth: Trans-Saharan Caravan trade, 1500-1900." In James Tracy (ed.), *The Rise of Merchant Empires: Long-distance Trade in the Early Modern World, 1350-1750* (Cambridge: Cambridge University Press, 1990), 311-350; Austen and Dennis Cordell, "Trade, Transportation and Expanding Economic Networks: Saharan Caravan Commerce in the Era of European Expansion" in Alusine Jalloh and Toyin Falola (eds.), *Black Business and Economic Power*, (Rochester: Rochester University Press, 2003), 80-113.

²⁵ For this reason, scholars of trans-Saharan trade such as Ralph Austen, believed that there were "no serial records for Muslim firms" (Austen, "Marginalization," 331).

²⁶ On the history of literacy and educational reform in the Jewish Diaspora and its role in endowing Jews with a comparative advantage in skilled urban professions see Maristella Botticini and Zvi Eckstein, "Jewish Occupational Selection: Education, Restrictions or Minorities ?" in *Journal of Economic History* 65, no. 4 (December 2005): 922-48. For the first examination of the relevant historical records see S. D. Goitein, *A Mediterranean Society: The Jewish Communities of the World as Portrayed by the Cairo Geniza*, vol. 5: The Individual (Berkeley [1988] 1999).

century Libyan traders, and the contributions of John Hunwick, few scholars have mined the commercial papers of trans-Saharan traders.²⁷

Muslim long-distance traders mitigated the logistical challenges of long-distance trade by relying on what I have termed a 'paper economy of faith.²⁸ By drawing contractual agreements and dispatching commercial correspondence they generated commercial efficiencies that reduced the overall cost and risks involved in transacting in foreign markets. In such as way, property rights were secured through the writing of deeds, from sales to donations, as well as inheritance documents, including wills, that were committed to writing. Letter-writing, shopping lists, waybills and the use of account books or commercial ledgers facilitated record-keeping and communication between long-distance traders. Concurrently, Muslim traders relied upon an Islamic legal and institutional framework for purposes of accounting and accountability, while Muslim judges and jurists defined legal norms and acted as mediators in commercial disputes. Possessing written records was vital to the efficient management and transparency of commerce even for sedentary and itinerant merchants who belonged to a specific trade network that provided additional institutional support to long-distance trade.

In his insightful work on the influence of writing on the organization of society, Jack Goody explains how writing contributed broadly to economic development by:

promoting new technologies (and associated division of labor), in extending the possibilities of management on the one hand and of commerce and production on the other, in transforming methods of capital accumulation, and finally in changing the nature of individual transactions of an economic kind.²⁹

It follows, therefore, that access to cheaper paper had a significant impact on institutional change and the administration of the economy by enabling increased instrumental complexity in finance and exchange. Writing meant that transactions were no longer reliant "upon the memory of

²⁷ Harmann, "The Dead Ostrich: Life and Trade in Ghadames (Libya) in the Nineteenth Century." *Die Welt des Islams,* vol. 38, no. 1 (1998), 9-94 based on Bashīr al-Qāsim b. Yūsha', *Ghadāmis. Wathā'iq Tijāriyya Tārikhiyya Ijtimā 'iya (1228-1312)*(Tripoli, 1983); Ennaji and Pascon, *Le Makhzen et le Sous al-Aqsa: La correspondance politique de la maison d'Iligh (1821-1894),* (Paris: CNRS, 1988); Hunwick, "'Islamic Financial Institutions:

Theoretical Structures and Aspects of their Application in Sub-Saharan Africa." In *Credit, Currencies And Culture: African Financial Institutions In Historical Perspective.* Endres Stiansen and Jane Guyer Eds. (Uppsala: Nordiska Afrikainstitutet, 1999), 72-99.

²⁸ See Lydon, *On Trans-Saharan Trade: Islamic Law, Trade Networks and Cross-Cultural Exchange in Western Africa* (submitted manuscript), Chapters 1, 3 & 5. I elaborate on this concept below.

²⁹ Jack Goody, *The Logic of Writing and the Organisation of Society* (Cambridge, 1986), 46.

witnesses who were subject to the constraints of forgetfulness, mortality or partisanship."³⁰ It made it easier to manage complicated transactions by keeping track of accounts, payable and receivable, and communicating such dues "not only with others but with oneself."³¹ Literacy represented a technological innovation that transformed trade between familial as well as non-familial partners, significantly contributing to reducing the cost of transacting.

Writing paper revolutionized the commercial world of long-distance traders in the premodern period. Keeping written trade records, from contracts to correspondence, that is to say working in a "paper economy" to borrow an expression Shelomo Goitein used when describing the world of Jewish merchants documented in the Cairo Geniza, enhanced economic performance.³² Paper was seemingly as key a transaction cost for trans-Saharan traders as it was for the Maghribis studied by Avner Greif.³³ Indeed without literacy and access to a stable paper supply it is hard to imagine the efficient operation of far-flung trade networks. For both Jewish and Muslim traders, their literacy enhanced network externality, allowing for efficient accounting, information flows, and legal transparency to solve the commitment problem and enforce sanctions. In this sense then, Muslim caravaners, like their Jewish counterparts who shared a similar "attitude toward learning and the learned," could be said to have depended on a "paper economy of good faith," an expression derived from combining the ideas of Goitein and Pierre Bourdieu.³⁴

The Contractual World Of Muslim Caravaners

Avner Greif made important contributions to our understanding of agency relations based on his case study of Maghribi and Genoese Jewish traders in the medieval period.³⁵ He argued that partnerships and other cooperative agreements were most efficient between members of a

³⁰ Ibid, 70-1.

³¹ Ibid, 83.

³² Goitein, Letters of Medieval Jewish Traders (Princeton University Press, 1973) 7-8

³³ See Greif, Institutions and the Path to the Modern Economy (New York: Cambridge University Press, 2006).

 ³⁴ Goitein, *Letters of Medieval Jewish Traders*. Princeton University Press, 1973, 7-8, and Pierre Bourdieu,
 "Structures, Habitus, Power: Basis for a Theory of Symbolic Power," in Nicolas Dirks, Geoff Ely, and Sherry Ortner (eds.), *Culture, Power and History: A Reader of Contemporary Social Theory* (Princeton: Princeton University Press, 1994), 168-9. Bourdieu discusses an "economy of faith" in the Muslim Kabyle context of Algeria.
 ³⁵ Avner Greif, "Contract Enforceability and Economic Institutions in Early Trade: The Maghribi Traders' Coalition." *American Economic Review*, vol. 83, Issue 3 (1993), 525-548; "The Fundamental Problem of Exchange: A Research Agenda in Historical Institutional Analysis," *European Review of Economic History*, vol. 4, no. 3 (2000), 265-9; see also his *Institutions and the Path to the Modern Economy* (New York: Cambridge University Press, 2006).

commercial coalition, or trade network, that provided the necessary institutional support for multilateral reputation mechanisms to control opportunistic behavior. Discussing the advantages of various partnership agreements negotiated between Muslim investors and traders, or what he called "Islamic partnerships," Kuran recognized that such formulae not only reduced transaction costs, but they also "were *designed to strengthen, if not to create, mutual trust among individuals* who could not necessarily rely on pre-existing trust grounded in kinship."³⁶ The observations of both Greif and Kuran are especially relevant when considering that many Saharan partnership agreements were negotiated between family members as well as between partners in trade. The remarkable scholarship of Abraham Udovitch on the institution of Islamic partnerships, which is based on the classic sources of the four Sunni doctrines of Islamic law, best documents the patterns and rules governing these types of agreements.³⁷ But while the modalities are well known, few have consulted the archival record to assess how Muslims applied partnership rules in any given historical setting.³⁸

The Qur'ān, one of the fundamental sources of Islamic law, set a modus operandi for the conduct of trade. It is tempting to link this to the fact that Muḥammad, the conveyer of the holy book of Muslims, worked on contract as a long-distance trade in seventh-century Arabia. It provided clear guidelines for contractual agreements, instructing believers to commit them to writing in the presence of witnesses, which are worth citing here *in extenso*:

Believers, when you contract a debt for a fixed period, put it in writing. Let a scribe write it down for you in fairness; no scribe should refuse to write as God has taught him. Therefore let him write; and let the debtor dictate, fearing God his Lord and not diminishing the sum he owes... So do not fail to put your debts in writing, be they small or big, together with the date of payment. This is more just in the sight of God; it ensures accuracy in testifying and is the best way to remove all doubt. But if the

³⁷ Abraham Udovitch, "Credit" and "Labor Partnerships in Early Islamic Law." *Journal of Economic and Social History of the Orient*, vol. X, no. 1 (1967), 64-78; "At the Origins of the Western Commenda: Islam, Israel, Byzantium," *Speculum*, vol. 37, no. 2 (1962) 198-207; and *Partnership and Profit in Medieval Islam* (Princeton: Princeton University Press, 1970).

³⁶ Timur Kuran, "The Islamic Commercial Crisis: Institutional Roots of Economic Underdevelopment in the Middle East," *Journal of Economic History*, vol. 63, no. 2 (2003), 418 and 420 (emphasis mine).

³⁸ Udovitch, "Theory and Practice of Islamic Law: Some Evidence from Geniza" (*Studia Islamica*, no. 32 [1970], 289-303) did attempt to examine fragments of Jewish partnership agreements drawn from the Geniza records. Moreover, Greif has made important remarks about agency relations mainly based on indirect evidence derived from medieval trade correspondence from the Geniza and other sources (*Institutions*, 285-7).

transaction in hand is a bargain concluded on the spot, it shall be no offence for you if you do not commit it to writing...Call in *two male witnesses* from among you, but if two men cannot be found, then *one man and two women whom you judge fit to act as witnesses*; so that if either of them commits an error, the other will remember. Witnesses must not refuse to give evidence if called upon to do so.³⁹

Muslims were directed to write contracts, but also to abide by their terms. Verses such as "O you who believe, commit to your contracts" (*Ya'ayuhā al-ladīna āmanū awāfū bil-'uqūd*), enjoined Muslims to *commit* to fulfilling their contractual obligations.⁴⁰

Nineteenth-century trans-Saharan traders took these religious obligations seriously, and thankfully for historians, many of their descendents have preserved their documents, including canceled debt receipts.⁴¹ The volume of commercial records of prominent and not so prominent trans-Saharan traders from the nineteenth century is a clear indication of the extent to which they depended upon the paper economy for running their businesses. Saharan family archives, therefore, often contain bundles of ' $uq\bar{u}d$ (sing. 'aqd), a term literally meaning "contracts" used generically in the western Sahara for commercial documentation. Sometimes, such records were referred to with the more generic term for legal documentation ($wath\bar{a}'iq$), discussed below. However, sources indicate that not every contract or partnership agreement was recorded in writing. Many nineteenth-century fatwas deal with disputes concerning oral contracts. Furthermore, not everyone possessed sufficient levels of literacy or the resources to operate fully in a paper economy. Yet the Saharan evidence leaves little doubt that written agreements were preferred especially for drafting contracts.

The well-known eleventh-century Muslim jurist Shams al-Dīn al-Sarakhsī described best the advantages of this strategy:

The purpose then of a document is reliance and precaution...Partnership is a contract that extends (into the future). The recording of a deed is, thus,

³⁹ Qur'ān 2:282-3 (emphasis mine).

⁴⁰ Qur'ān 5: 1.

⁴¹ That such records were preserved for posterity is as much an indication of the value of written document for these Muslim communities, as it is of the faith they placed in such records for securing property rights.

recommended in such a contract so that it becomes a decisive proof between them in case of dispute.⁴²

By writing and making multiple copies of specific contracts, partners eliminated ambiguity in agreements and avoided potential disagreements by defining the terms, obligations and claims of business partners. They wrote debt and equity contracts and their derivatives, such as lease contracts and entrustments or storage contracts, and they also engaged in complicated multiple-party financial operations including forward purchases. Because of the Islamic interdict on the practice of usury, many of these contractual arrangements contained subterfuges to mask interest rates or give them a different name.⁴³ Moreover, through letter-writing and the use of messengers, merchants monitored the activities of agents, put pressure on defaulting parties and otherwise exchanged market information.

Table 3: Paper Economy				
of Nineteenth-Century Trans-Saharan Traders				
Contracts:				
Agency; Labor, Leasing; Debt and Equity; Storage or				

Agency; Labor, Leasing; Debt and Equity; Storage or			
Entrustment; Forward-Purchase; Trade-without-Commission;			
Commenda-type Contracts and other Partnership Agreements			
Correspondence (information flows)			
Caravan Lists (participants and their camel-loads)			
Shopping Lists (with purchasing instructions)			
Waybills (lists of goods included in packed camel-loads to			
establish ownership)			
Accounting Books and Ledgers			

Contracts between sedentary investors and associates, traveling merchants, and trade agents were always drafted in the presence witnesses who were known members of the community. In principle, all literate Muslims could draft contracts as long as they were witnessed by either two men, or two women and one man, as per the Qur'ān. They were written "just in sight of God" and therefore were considered to be *personal* agreements between contracting parties as opposed

⁴² Ahsan Khan Nyazee Imran, *Islamic Law of Business Organisation and Partnerships* (Islamabad: Islamic Research Institute, 1999), 31, citing al-Sarakhsī's *al-Mabsūț*, volume 30, 155. This jurist was of the Hānafī school of Islamic law but his statement is equally applicable to all Muslims, including those following the Mālikī legal doctrine.
⁴³ Lydon, *On Trans-Saharan Trails*.

to *public* legal documents.⁴⁴ As such contracts were informational instruments representing proof of transactions between partners. But in cases of a dispute, a written contract in and of itself could not be used as free-standing evidence in a court of law, in accordance to Islamic legal practice which, as we shall see shortly, placed value on testimonial evidence. Such instruments had a legal value when all those involved in its drafting, the contracting parties and the appropriate witnesses, could testify to their validity. In other words a contract involved at least four people who were its executors, and it was by nature an oral agreement. The document was simply a record of the agreement.

As informational instruments, contracts had to be precise. At times they were so specifically drawn that small slips of the pen, crossings-out or deletions were acknowledged in text to ensure authenticity.⁴⁵ Whether written in person or by a scribe serving as informal notary and witness, contracts contained stipulations about purposes and due dates. The document was duplicated for the safe-keeping of both contracting parties. For *commenda*-type contracts, a copy would remain in the hands of the principal while the other traveled with the itinerant trade partner. For this reason, many contracts consulted were stained by the indigo blue dye of Saharan cotton clothing bearing the signs of having been carried for long periods of time. Other times, contracts were embedded in multipurpose commercial letters dispatched via agents to partners in trade.

Nineteenth-century trans-Saharan traders used a variety of contractual arrangements between themselves, and even between husbands, wives and close kin. The most common contracts, such as joint-liability contracts, mixed debt and equity contracts, agency and labor contracts often were modeled on contractual formularies,.⁴⁶ The use of contract formularies was widespread, and from an early date, as evidenced by the well-developed literature on the subject produced by jurists of Mālikī legal doctrine. Jeanette Wakin, who produced the most significant study of Islamic contractual models in English, notes that the earliest known example was

⁴⁴ Emile Tyan, "Le notariat et le régime de la preuve par écrit dans la pratique du droit musulman." *Annales de la Faculté de Droit de Beyrouth*. No. 2 (1945), 12-3. More on this subject below.

⁴⁵ Typically, an inadvertent scribble on a contract was cause for a special explanatory in-text note such as "and what is on the second sentence in not of consequence." Sales contract dated 1280/1864 (IK3)-Family Records of Shaykh Ibrāhīm al-Khalīl (Tīshīt, Mauritania).

⁴⁶ For a detailed discussing of the prevailing contractual agreements in nineteenth-century Sahara see Lydon, *On Trans-Saharan Trails*, chapter 5 and ". الربح والمشاركة في التجارة عبر الصحراء الغربية في القرن التاسع عشر"

^{(&}quot;Contracting Caravans: Partnership and Profit in Nineteenth-Century Trans-Saharan Trade."), in Mohamed Jerari, ed. *Turūq Al-Qawāfil* (Tripoli: Libyan Jihad Center for Historical Studies, forthcoming).

written by a ninth-century Mālikī legal scholar.⁴⁷ These formulary manuals were known as *wathā'iq* (legal documents) by Mālikīs, and *shurūț* (stipulations or *provisos*) in the legal literature of the other Sunni law schools. These legal tools systematized the drafting of contracts rendering them more transparent and personally binding. They were not developed by Muslims but have their antecedents in Greco-Roman legal traditions.⁴⁸

Saharan private libraries contain copies of formularies or legal templates for the proper formatting and drafting of contracts suited to particular needs. They provided a legal framework with clear legal verbiage that included 'fill in the blank' spaces for names of the contracting parties and the witnesses, as well as terms and limits. Of course such documents always contained the appropriate religious invocations and were to be written in "Fear of God." The models were originally designed to be followed by Muslim scribes who made a living from drafting and witnessing the deeds of contracting parties. But the spread of literacy gave widespread currency to these instruments, to the point that a majority of nineteenth-century trans-Saharan traders drafted their own contracts, cutting out the middleman as it were. One of the most common contractual forms was the agency contract. The following example was entitled "shipment via agency" (*risāla bil-wakāla*).

In the name of God, the Compassionate and the Merciful. This is to inform the observer of the document and whomever reads it attentively that so and so (Fulān

b. Fulān), May God facilitate his affairs, commissioned as his representative his brother,⁴⁹ the industrious so and so, the helper of God. And he was entrusted with his property in the proper manner, and he abides by the agreed-upon entrustment of such and such by the strength of the agency (*al-wakāla*) and the representation

⁴⁷ Jeanette A. Wakin, *The Function of Documents in Islamic Law: The Chapter on Sales from Tāḥāwī's Kitāb al-Shurūṭ al-Kabīr* (Albany: State University of New York Press, 1972), 14, fn.1. See also Aharon Layish, "*Shahādat Naql* in the Judicial Practice in Modern Libya," in Khalid Masud, Peters and Powers, eds., *Dispensing Justice in Islam: Qadis and Their Judgments* (Leiden: Brill, 2006), 496-7.

It is interesting to note that standard-form contracts became prevalent in England only after the 1850s. See John H. Baker, *An Introduction to English Legal History* (London: Butterworths, 2nd Edition, 1979), 296-7.

⁴⁸ Wakin, *Function*, 2-3, 7. See also Tyan, "Le notariat,"15. For a discussion of commenda contracts in medieval Venice see Dean Williamson, "Transparency, Contract Selection and the Maritime Trade of Venetian Crete, 1303-1352." (July 2002) and Harris, *Industrializing English Law*, 19-21 for information on several commom partnership in England.

⁴⁹ Here the term 'brother' could refer to either kin or co-religionary.

(al-niyāba), in principle and in practice ('aslan wa far'an), by force and by law,

and so on this day of this year this was witnessed by so and so, and so and so...⁵⁰

Built into the contract was the concept that divine power commanded that what was agreed upon in *principle* be turned into *practice* "by force and by law." The contracting parties placed their trust in God considered the ultimate enforcer.

Contracts with specific contingencies were drafted in accordance to pro-formatted models. However, a review of the records of nineteenth-century trans-Saharan traders reveals that not all contracts followed these to the letter. Oftentimes key information went unrecorded, seemingly taken for granted, including specific responsibilities and conditions. Another peculiarity is that contracts rarely mentioned profit-sharing arrangements, commissions, or wages. These omissions were due to the fact that there were set commission rates for certain routes and trade goods and established wages or interest rates, in accordance with the prevailing 'custom of traders' (*'urf al-tujjār*) that required no mention on paper.

The widespread use of written contracts, along with other documents of this paper economy, contributed to solving the commitment problem, which was one of the fundamental problems of exchange in early modern trade identified by Greif.⁵¹ As the eleventh-century jurist Al-Sarakhī expressed, written contracts provided "a decisive proof between [traders] in case of dispute."⁵² A contract or partnership agreement written in good faith worked as a deterrent for Muslim traders to cheat their partners or not fulfill their contractual obligations. In this sense, to reiterate Kuran's point, written contracts strengthened, or even created bonds of trust between traders.

Contracts were *à prori* self-regulating since in principle all Muslims feared God the supreme judge of their actions. Of course such agreements did not altogether solve the commitment problem. There was always someone who did not live up to their end of bargain by force of circumstance or not. But while peer pressure and public denunciation of traders' transgressions were often effective enforcement mechanisms, as per Grief, these were not the actions of last

⁵⁰ Agency Contract Formulary (AM 9), Family Archives of 'Abd al-Mu'min (Tīshīt, Mauritania). For a similar contract formula describing a joint-liability contract (*mufāwaḍa*), see Abraham Udovitch, "Credit as a Means of Investment in Medieval Islamic Trade," *Journal of the American Oriental Society*, vol. 87, no. 3 (1967), 260-1.

⁵¹ See Greif, *Institutions and the Path to the Modern Economy* (New York: Cambridge University Press, 2006), 62-5 and "The Fundamental Problem of Exchange: A Research Agenda in Historical Institutional Analysis." *European Review of Economic History*, vol. 4, no. 3 (2000), 251-84.

⁵² Full quote appears earlier in-text.

resort available to trans-Saharan traders or even eleventh-century Maghribi traders.⁵³ In both cases, they could also choose to appeal to the religious establishment to mediate in long-distance commercial disputes. Legal-service providers such Muslim judges were called upon to perform as notaries, scribes and witnesses, and otherwise mediate or arbitrate in the eventuality of disputes. But while possessing a written record of original agreements functioned as an informational tool, such documents were not considered legal evidence without the authentication of those who had witnessed their recording.

Islamic Law and the Business of Justice

Islamic law was considered to be a 'divine science' that "constituted a miracle for the people," as one nineteenth-century Saharan legal scholar impressed upon his readers.⁵⁴ Indeed, the law was arguably the central institutional framework in Islam and a quintessential part of being Muslim. As stated in the Qur'ān, "they will not—I swear—be true believers until they ask You to arbitrate in their disputes."⁵⁵ Its inherent legal framework that dictates, among other things, the ethical norms of business behavior, sets Islamic institutions apart from other religious systems. Indeed, as Brinkley Messick has argued, it is useful to think of the divine law of Islam or *shari'a* as a ""total' discourse, wherein "all kinds of institutions find simultaneous expression: religious, legal, moral and economic.""⁵⁶

Saharan sources reveal the key public function of local experts of the law in maintaining social and economic order.⁵⁷ Based on formal Islamic legal references, local jurisprudence and prevailing cultural customs, judges ($q\bar{a}d\bar{i}$) and jurists (*mufti*) shaped the rule of law and enforced their rulings through reputation mechanisms and community pressure. By providing mediation services, writing legal opinions and issuing official rulings they not only arbitrated in disputes, they also set guidelines for local and cross-cultural exchange. In the city-state context of Saharan

54 Fatwā issued by 'Abd al-'Azīz b. al-Shaykh al-Māmī (Gibla) to 'Abdallah b. Arwīli, Wād Nūn Inheritance Case (1269/1852-3), Arwīlī family records deposited in the house of Shaykh Hammuny, former qādī of Shingīți (Mauritania).

⁵³ Greif, *Institutions*, and "Contract Enforceability and Economic Institutions in Early Trade: The Maghribi Traders' Coalition." *American Economic Review*, vol. 83, Issue 3 (1993), 525-548.

⁵⁵ Qur'ān (IV:65) quoted in Fatwā issued by 'Abd al-'Azīz b. al-Shaykh al-Māmī in nineteenth-century southern Mauritania (see note above).

⁵⁶ Brinkley Messick, Calligraphic State, citing Marcel Mauss, The Gift (New York: Norton, 1967), 1, 3.

⁵⁷ Lydon, On Trans-Saharan Trails.

oasis towns, Muslim legal-service providers adjudicated in all civil and commercial cases, but criminal matters belonged to the legal realm of clan leaders and town councils who oversaw the affairs of the community. Nineteenth-century legal sources reveal that experts of the law were especially active in deliberating commercial matters ranging from determining the lawfulness of certain transactions to defining property rights of all kinds. As indicated in the Tables 1 and 2, there were close to 300 active *muftīs* servicing the areas between Southern Morocco and Northern Senegal in the nineteenth century. So it goes without saying that they were among the largest consumers of imported writing paper.

Like most African Muslims, Saharans followed the Mālikī doctrine of Islamic law. Its basic civil and commercial principles were common knowledge to Saharan Muslims. The law framed their contractual agreements and was invoked even in privately resolved legal disputes.⁵⁸ This is not surprising when considering that educated Muslims not only memorized the entire Qur'ān, they also tended to be well-versed in the legal codes. Memorization of the most popular legal manuals, such as Sīdī Khalīl ibn Ishāq's compendium of Māliki law (*al-Mukhtaşar*), was part of the Islamic curriculum in this region of Western Africa.⁵⁹ But as elsewhere in the Muslim world, Islamic legal practice was defined by a combined interpretation of the *shari'a* discourse as well as local customary law. In fact it could be argued that Islamic legal practice was, by its very nature, a cultural hybrid. Indeed, customary law (*'urf*) and common practice (*'āda*) were determinants of the law alongside the classic sources of Islamic jurisprudence (*uşūl al-fiqh*), especially when the latter failed to provide answers or simply when 'the law of the land' (*'urf al-balad*) prevailed.⁶⁰ At the same time what constituted normative legal behavior was also influenced by local cultural practice, and while Islamic legal practice was not considered to be

⁵⁸ Example of a dispute over the revocation of a sale between traders. Commercial Correspondence (FS 7), Fāḍil Al-Sharīf Family Archive (Tishīt, Mauritania). I discuss this case in "Slave Ownership, Muslim Contest and Legal Culture in Nineteenth-Century Mauritania," *International Journal of African Historical Studies* (forthcoming).

⁵⁹ For a discussion of the main Mālikī legal reference manuals used in West Africa, see Lydon, "Slavery, Exchange and Islamic Law: A Glimpse from the Archives of Mali and Mauritania" *African Economic History*, 33 (2005), 115-149. Information of Saharan Islamic curricula can be found in Lydon, "Inkwells," and for a discussion of legal education see Mukhtār wuld Ḥāmidun, *Ḥayāt Mūrītāniya: ḥayāt al-thaqāfiya* (Tunis: 1990), 5-25.

⁶⁰ Shaykh al-Māmī, *Kitāb al-Badiyya* (manuscript copy in author's possession). This particular jurist, who was among the most respected of his time, was very explicit about how jurists needed to incorporate local knowledge in their rulings. For a discussion of this in the medieval Maghrib see David Powers, *Law* and *Law*, *Society and Culture in the Maghrib*, *1300-1500* (New York: Cambridge University Press, 2002).

case-law, local jurists wrote large collections of legal opinions ($fat\bar{a}w\bar{a}$) and shorter *responsae* (*nawāzil*) that influenced the rulings of judges. Legal-service providers and their constituents, therefore, drew upon both formal knowledge of Islamic codes, locally prescribed cultural norms or a combination of both to resolve contentious issues.

In his study of the law in the medieval Maghrib, which is based on several cases drawn from the well-known fifteenth century collection of fatwas compiled by al-Wansharīsī, David Powers best describes the dynamic interplay between the $q\bar{a}d\bar{t}$ and the *muftī* in dispensing Islamic justice. To paraphrase him, the $q\bar{a}d\bar{t}$ assessed the facts of a case while the muftī assessed the legal doctrine.⁶¹ The *muftī* was a legal scholar or jurisconsult specializing in Islamic legal literature who serviced the community by writing legal treatises and opinions. The powers of $q\bar{a}d\bar{t}$ as the executive legal authority are neatly summarized in a nineteenth-century Saharan fatwa. It was written by *muftī* who was asked to evaluate the proceedings of a qādī in a mid-nineteenth century inheritance case.

The qādī decrees based on [all the available information]...because he is in charge of writing judgments on quarrels, disputes and discord between relatives, because he is *the governor* (*al-hākim*) of this location *de facto* and *de jure* ...And the governors are entrusted only to reprimand the oppressors, to bring to heel the evildoers and the corrupt (*ahl al-shar wa al-mafsada*).⁶²

Saharan $q\bar{a}d\bar{s}$, therefore, were considered powerful authorities who "governed" as the local representatives of the law. The same was true in other Muslim communities where the terms for judge $(q\bar{a}d\bar{t})$ and governor $(h\bar{a}kim)$ were used interchangeably.⁶³

 $Q\bar{a}d\bar{s}$ based their decisions on the classic Mālikī legal reference manuals, precedence in the legal literature of the locale, and testimonial evidence. They thoroughly researched their cases through extensive inquiries and interviews with all the available witnesses as well as

⁶¹ Ibid., 207 and 226.

⁶² Wād Nūn Inheritance Case (1852-3), Arwīlī family records deposited in the house of Shaykh Hammuny, former qādī of Shingīti (Mauritania). See document in Appendix.

⁶³ Messick, *Caligraphic State*, 168-9. As Messick notes, in medieval Europe the court was held by both kings and judges, so it stands to reason that the temporal and political powers were be reunited in the Islamic context.

consultations with other $q\bar{a}d\bar{s}$ and *muft* \bar{s} in order to "to distinguish between competing versions of the 'truth' in an effort to reach a judgment."⁶⁴ Consulting other jurists was not only common practice, it was recommended by the main manuals of the Mālikī legal doctrine.⁶⁵ When he reached a verdict, the $q\bar{a}d\bar{t}$ committed his judgment to writing, keeping the original and providing a copy to the winning party.

Muhammad Khalid Masud, Rudolph Peters and David Powers recently provided an excellent historical survey of how justice was dispensed in the Muslim world.⁶⁶ These authors describe the history of Islamic justice from a state-centric perspective that draws heavily from the Ottoman experience. In the latter context, which took full form in the second-half of the nineteenth century, Ottomans developed a tightly controlled system of tribunals and rotating qadiships. Moreover, they reinstated the position of a supreme magistrate, the "qādī of qādīs," that had been practiced in the early centuries of Islam.⁶⁷

In nineteenth-century western Sahara--a region not ruled by a single state or subjected to imperial sovereignty where city-states governed their affairs while paying protection money and tribute to nomadic warriors--Islamic legal practice differed markedly from the organization of justice under Ottoman rule. A judicial hierarchy did not exist in the Saharan context where reputation, established through legal deliberations fought with paper and pen, was what determined the informal ranking of regional specialists of the law. Each Saharan oasis town tended to have a locally appointed $q\bar{a}d\bar{1}$ who ruled alongside several working $q\bar{a}d\bar{1}s$ and in consultation with *muft* \bar{s} . The legal system was kept in check by the regional community of jurists who read and scrutinized each others' rulings, especially on highly contested matters involving notable personalities. The $q\bar{a}d\vec{1}s$ authority rested on his reputation and scholarly

⁶⁴ Powers, *Law*, 88.

⁶⁵ Ahmad al-Wansharīsī, *Kitāb al-Wilāyāt*, annotated by Henri Bruno and Gaudefroy-Demombynes (Rabat: Editions Félix Moncho, 1937).

⁶⁶ Muhammad Khalid Masud, Rudolph Peters and David Powers, "Qādīs and Their Courts: An Historical Survey," in Khalid Masud, Peters and Powers, eds., *Dispensing Justice*, 1-44. This very useful description is based on the comprehensive survey published in 1938 by Emile Tyan. It is surprising that these authors only made passing reference to the problematic function of document in Islamic legal practice (28).

⁶⁷ Masud, Peters and Powers, "Qādīs and Their Courts," 34-6 for an overview of the changes implemented in the Ottoman empire.

credentials, and usually the profession was passed down from father to son together with the inherited reference libraries.

Saharan judges relied on the trusted opinions of notables, often members of the town council, whose reputations for being just (*'adl*) or possessing unquestionably 'sound morality' (*'adāla*) was well-established. In fact each community tended to have known figures who acted as "professional witnesses" (*shuhūd 'udūl*) in all matters, including the witnessing of contractual agreements. This was not unlike the situation described by historian Ibn Khaldūn in fourteenth-century Tunisia where "people who have transactions to make can engage them to function as witnesses and register the (testimony) in writing."⁶⁸ But Saharan oases were not large enough to sustain a class of professional full-time witnesses and scribes.

As legal service providers in civil and commercial matters, $q\bar{a}d\bar{s}$ also came to play nonnegligible roles as financial intermediaries. Indeed, they served as legal guardians in matters concerning property rights, including the property of orphans and inheritance estates. They were also intermediaries entrusted with sums of money between physically distant parties, such as trade partners or even husbands and wives. In fact, $q\bar{a}d\bar{s}$ often mediated in debt collections by finding or pressuring defaulting parties. In a letter asking for a $q\bar{a}d\vec{r}$ s assistance in a debt recovery, the writer praises God for the presence of legal representatives, and especially the $q\bar{a}d\bar{t}$,

our witty fellow ($\dot{a}r\bar{f}n\bar{a}$), our helper and $q\bar{a}d\bar{i}$ of our debts ($q\bar{a}d\bar{i}$ duyyunin \bar{a})...and of our conflicts (*sharr'inā*), of the integrity of our conduct (*lirashādinā*)...[from the one] who is in need of your assistance, he informs you that he needs your help to collect his property, of the share of silver...and its removal from the hands of the one whose hands it is in, in order to help us with the legal termination of the debt...⁶⁹

These financial services obviously reinforced judges' symbolic capital and their positions as legal authorities in Muslim societies, yet to my knowledge they have not been recognized in the

⁶⁸ Wakin, *Function*, 9; See also Tyan, "Le notariat," 16-24.

⁶⁹ Debt Recovery Plea (BA15), Family Archives of Bū 'Asrīyya (Tīshīt, Mauritania). The letter begins tellingly with this sentence: "Help us recover our debts and help us in our problems to uplift our stress and alleviate our sorrow that which takes our joy away and that He guide us towards our ideals."

literature on the organization of Islamic justice.⁷⁰ It is tempting to compare the roles of $q\bar{a}d\bar{i}s$ as financial intermediaries to those of nineteenth century Parisian notaries documented by Philip Hoffman, Gilles Postel-Vinay and Jean-Laurent Rosenthal.⁷¹

Lack of Faith in Paper in Islamic Law

The function of documents in Islamic law is critical to understanding the inherent inefficiency of Islamic institutions. Émile Tyan was the first Westerner to draw attention to this incongruity, but aside from his work, that of Wakin's discussed above and the original contributions by anthropologist Brinkley Messick, this institutional flaw has hardly drawn the attention of scholars of Islamic legal practice or historians of Muslim societies.⁷² While Qur'ānic verses placed great emphasis on the importance of writing and documenting credit transactions, documents such as debt contracts had no legal value in and of themselves, with some exceptions. The rationale for this position is summarized in the quote of Imam Yahya that appears at the beginning of this paper. It stems from a fundamental distrust of all documents that could be tampered with or simply forged. Similarly, all written documents, including fatwas, were not legally binding opinions and while they influenced the decisions of $q\bar{a}d\bar{a}s$ they could not be used as legal evidence in a court of law.

The underlying premise of Islamic traditions of law was the belief that when placed under oath Muslims could not conceal the truth. The act of witnessing was inextricably tied to the first pillar of Islam, the witnessing of one's faith to God (*shahāda*). Therefore, it was not lawful to introduce contracts or any written documentation as evidence in litigation without the oral testimony of at least two "credible" witnesses certifying authenticity. Orality was central to the practice of the Islamic legal system which hinged upon a reliance on memory despite the popularity of writing. Tyan explained the rationale as followed: "in principle, from the point of

⁷⁰ For a discussion of the financial services of Muslim judges in Senegal, see Lydon, "Droit islamique." Incidentally, the role of qādīs as financial intermediaries was not mentioned in Masud, Rudolph Peters and David Powers, "Qādīs and Their Courts."

⁷¹ Philip T. Hoffman, Gilles Postel-Vinay and Jean-Laurent Rosenthal. "What do Notaries do?. Overcoming Asymmetric Information in Financial Markets: The Case of Paris, 1751," *Journal of Institutional and Theoretical Economics*, 127:3 (1998), 499-523. See further discussion below.

⁷² Tyan, Tyan, *Histoire de l'organisation judiciaire en pays d'islam* (Leiden: 1960). and "le Notariat"; Wakin, *The Function*, Messick, *Calligraphic State*. It is surprising that only made passing reference to the problematic function of document in Islamic legal practice was made by Masud, Peters and Powers, "Qādīs and Their Courts," 28.

view of legal proof, there was no difference between the written and the non-written agreement: in both cases, the element that constituted the proof was exclusively the witnesses' testimony."⁷³ In Islamic law legal evidence, known as *al-bayyina*, "denotes the proof *par excellentiam* –that established by oral testimony—although from the classical era the term came to be applied not only to the fact of giving testimony at law but also to the witnesses themselves."⁷⁴

As stated in the work of al-Ramlī, the influential tenth century scholar of Islamic law, "legal evidence is exclusively of three kinds: testimony produced by reliable witnesses (*shahāda*), declarations or acknowledgements (*iqrār*), and oaths (*yamīn*)."⁷⁵ The basic dictum of Islamic law was that the claimant produced the evidence while the defendant gave the oath (*al-bayyina 'ala al-mudda'ī wa al-yamīn 'ala man ankar*). As noted above, $q\bar{a}d\bar{a}s$ often relied on reputed witnesses (*'adāla*). To establish testimonial evidence, they sometimes hired notaries whose task it was to collect the opinions of witnesses. In cases involving large numbers of witnesses, notaries would reproduce their testimonies in a document known as *rasm istir'ā'* (document of observation).⁷⁶ Powers discusses a contested inheritance case that led to the production of such a legal document containing no less than ninety witnesses.⁷⁷

Islamic legal practice, however, at times diverged somewhat from the theory, and there were marked differences across the four Sunni doctrines of Islamic law. The Hanafī school of law held the most conservative position by refusing the introduction of documents in a court of law.⁷⁸ However the Mālikī tradition, practiced mainly in North and West Africa, as well as in Muslim Andalusia, was exceptional in its recognition of certain special circumstances under which written documents after proper authentication by qualified witnesses could be used.⁷⁹ If properly witnessed, they could be used as informational devices. As Tyan explained, many Malīkī scholars, starting with the eleventh century Ibn Farhun, were quite outspoken about their

⁷³ Tyan, "Le notariat," 10.

⁷⁴ *EI*, "Bayyina" by R. Brunschvig.

⁷⁵ Tyan, "Le notariat,"12. See also Masud, Peters and Powers, "Qādīs and Their Courts,"25-8. Also interview with Qādī Muḥammad 'Abd al-Fatāḥ 12/14/06, Ghāt (Libya).

⁷⁶ Powers, *Law*, 31 fn.35.

⁷⁷ Powers, *Law*, 32.

⁷⁸ Tyan, "Le Notariat," 82-4.

⁷⁹ Wakin, Function of Documents, 9.

opinion that anything that allowed for the truth to be known was a valid source of evidence.⁸⁰ In practice, therefore, Malīki law was more flexible when it came to using documentary evidence.⁸¹ It is tempting to attribute the flexibility and particularity of Mālikī legal *fiqh* (jurisprudence) to local determinants and the need to adapt the law to specific market circumstances. The choice of this Islamic legal tradition and its evolution in the literature produced by Maghribi and West African legal jurists across the ages may well be a function of the institutional requirements to conduct trans-Saharan trade. Moreover, it could be argued that geographical factors set this long-distance trading world apart. But exploring the validity of this statement requires further research.

A cursory review of the available legal literature for the region of northwest Africa, that spans the period from the eleventh to the twentieth century, reveals how very few were the cases brought to the deliberation of *muftīs* involving the use of documents.⁸² Given that *à priori* written documents had no intrinsic legal value, this should not come as a surprise. The following four cases highlight the fundamental problem posed in Islamic legal institutions and the highly burdensome and ineffective witnessing procedure for contracts in civil and commercial matters.

The first case, detailed in a fourteenth century fatwa, dealt with the following legal question.⁸³ If a $q\bar{a}d\bar{i}$ witnessed the recording of a given contract, together with another morally sound witness (*shāhid 'ādl*), and then he was replaced with another judge after relocating to another town, should the contracting parties have their document witnessed again by the new $q\bar{a}d\bar{i}$? The question, in and of itself, reveals the practical concerns of contracting agents. The answer provided by the *muftī* is even more revealing of the inherent problems of the system for it

⁸⁰ Tyan, "Le Notariat," 6-7, fn.6

⁸¹ This is made clear in a nineteenth-century inheritance report documenting the efforts of debtors and creditors at the death of their trade partner to make due on their contractual obligations. The $q\bar{a}d\bar{a}$ examined contracts and executed procedures based on the good faith of the contracting parties (Lydon, *On Trans-Saharan Trails* Chapter 6). I will develop this point in the revised version of this paper.

⁸² This conclusion is drawn from my cursory survey of available material. The two most comprehensive fatwa collections are: 1. the collection of approximately 6,000 fatwas dating from the late fifteenth century of Ahmad b. Yahya al-Wansharīsī [1430-1508], *Mi'yār al-mu'rib wa al-jāmi' al-mughrib 'an fatāwā ahl Ifrīqīya wa al-Andālūs wa al-Maghrib*, vol. 1-13 (Rabat: Ministry of Awqāf, 1981-3) and 2. For the period from the late fifteenth century until the mid-twentieth century, the collection of about 5,000 fatwas over the next 500 years byYahya Ould El-Bara, *Al-Majmū'āt al-Kubrā fī Fatāwī wa Nawāzil Ahl'Arb wa Janūb 'Arb al-Ṣaḥra*, vol. 1-9 (Rabat: Ministry of Awqāf, forthcoming). I also consulted nawāzil (or short legal answers) from Mauritania and published works from Morocco. ⁸³ Yahya al-Wansharīsī, *Mi'yār*, vol. 10, 25-6.

exposes the ephemeral nature of written contracts. He replied that the contract did not need to be re-witnessed since the $q\bar{a}d\bar{i}$ in question was still alive, as was the other witness mentioned in the document. In this capacity the witnesses still could serve their duty by testifying to the contract in case of legal contest.⁸⁴

The second case, also from present-day Morocco, concerned a will written by a man whose brother contested his inheritance after his passing in 1400/803 *hijra*.⁸⁵ The man had written a will (*waṣiya*) on leather parchment (*ruqā`a kāghat*) where he bequeathed 200 *dinars* to relatives with whom he had spent the last years of his life. The document was witnessed in proper form, but its validity was contested by the brother who had inherited most of the estate. The jurist ruled that the document could be validated if one of the witnesses who had acknowledged the contract could be called upon to certify its validity, or if a morally sound witness who knew the deceased could identify that the document was in his writing. The reliance on the living, again demonstrates to what extent written documents had a certain expiration date, as they were rendered invalid after the passing of all reliable witnesses.

The third example documents an interesting case about a contested contractual agreement that took place in late-seventeenth and early-eighteenth century Fez.⁸⁶ Two men entered into litigation over the price of an agreed upon transaction especially when it unfolded that they had competing versions of the same contract. Each possessed a copy of the said-contract that contained differing statements about the agreed upon price, as well as one different witness to the transaction. This case illustrates the matter raised above by Imam Yahya concerning the obviously prevalent problem of forgery. The *muftī*'s reply is extremely insightful for he explained that the $q\bar{a}d\bar{a}s$ ruling over the case had several options. They could call all the witnesses mentioned in the contract and ask them to testify to the contract they had witnessed. But he admitted that this procedure was not without problems since "some witnesses may not remember with precision what was agreed" in the document. The other option was to have the witnesses read both contracts and swear under oath to their validity, but this too posed problem

⁸⁴ Al-Wansharīsī, *Mi 'yār*, Vol. 10, 25-6.

⁸⁵ Yahya al-Wansharīsī, *Mi 'yār*, vol. 10, 377-9.

⁸⁶ Al-Shaykh 'Īsā b. 'Aly al-Ḥusayn al-'Alamī, *Kitāb al-Nawāzil*. Edited by Majlis al-`ilmī, Fez (Rabat: Ministry of Awqāf, 1989), volume 3, 9-12.

since many $q\bar{a}d\bar{i}s$ complained that in those days and ages "peoples' morals have laxed" and they could not be taken seriously. This posed an even more serious problem that struck at the heart of the very foundation of the Islamic legal system, for such a case could expose the very unsettling fact that some witness or another was "abusing the *shahāda*."

Our final case, concerning the legal use of written documentation, dates from the midnineteenth-century Saharan region of present-day today southwestern Mauritania. It was featured in a collection of legal reponsae ($naw\bar{a}zil$) of a well-known jurist. He was asked to provide council on whether the handwriting in a contract could be authenticated by one of the original witnesses. This witness avowedly was not absolutely certain he could recognize the handwriting of the contracting party who wrote the document. Meanwhile the second witness, who apparently was best equipped to do so was currently out-of-town and unavailable for this purpose. In his answer, where he cited Sīdī Khalīl's manual of Mālikī law in reference to the statutes on declarations or acknowledgements ($iqr\bar{a}r$), the muftī stated that if the witness could not recognize the handwriting with certainty, even if he remembered with certainty the details of contractual agreement, then he could not validate its authenticity.⁸⁷

Contracts were considered first and foremost to be oral agreements. This is apparent from the cases examined here that seem to confirm the application of Islamic law on written documents. This should not detract from the importance of Muslims' reliance on literacy that enabled commercial and managerial efficiencies of the kind described above. But clearly, this was a very cumbersome, time-consuming and ultimately ineffective system. It is easy to see why the limitations of Islamic legal institutions posed a major obstacle to the development of modern economic systems.

Legalizing Paper and the Role of Notaries in Early Modern Trade

Powers likened the function of the $q\bar{a}d\bar{i}$ to that of a notary, and his court to "a clearinghouse for the notarization of legal documents."⁸⁸ The problem here, however, is that the $q\bar{a}d\bar{i}$ was a mere

⁸⁷ Muhammad al-Gasrī, Nawāzil (manuscript copy in author's possession).

⁸⁸ Powers, *Law*, 120. In identifying qādīs as notaries, he following Wakin who similarly used the term "Arabic notary" rather loosely without qualification (*Function*, 2-3).

mortal and his power of attorney was only valid during the time of his living. The ephemeral nature of such "notaries" and the problem this posed to the long-term validity of documentation is vividly captured in the fatwas discussed above. Since a document could only be validated if the handwriting was authenticated, this meant that once the writer, contracting parties and the witnesses had passed on, the document itself technically expired. It was only in the modern period, under Western influence brought about by colonial rule, that new institutions for the legalization of paperwork came into being in North Africa, and only in the twentieth century that such reforms took effect in now colonized Saharan regions.

It would be difficult to overestimate the impact of the shift from verbal commitments and oral testamentary evidence to legally certified paperwork, as an important step in the development of modern market economies based on impersonal exchange. The role of publicly licensed notaries in certifying contracts and deeds, through the use of officially-issued stamps or seals, in the presence of the contracting parties, invested paperwork with legal personality. The rise of a class of notaries with power of attorney to create legal paperwork to secure and transfer property rights across parties and generations was a major institutional innovation in the longrun.

It is worth considering another innovation in the area of written documentation in the use of signatures, seals and later stamps. These served to authenticate the authors of documents as well as to transform paper, by giving it public recognition, into official documentation. Private and public seals, perhaps of Chinese or at least Asian origin, used to certify oaths or authenticate transactions would become a common feature of legal documentation guaranteed and enforced by government institutions through the intermediary of notaries public. Ottoman court records consulted in Tripoli reveal the use of seals by individual men and women in place of signatures, which otherwise were rarely used in Muslim world. These small brass seals, readily available for purchase in the marketplace, presumably were much harder to forge than handwriting.

The history of notaries in Western Europe seems to date back to the medieval period. Studying the notarial records of Genoa, John McGovern dates the epistolary transition from the reliance on oaths (*ars dictaminis*) to the reliance on documents (*ars notaria*) to the thirteenth century. At this point notaries were drafting contracts with increasing precision so that each document was a complete record "independent of any reliance upon local knowledge or memory.³⁸⁹ This is when, according to McGovern, notaries would have "dispensed of the use of witnesses.⁹⁰ Genoa then was reputed for training high quality and dependable scribes.⁹¹ By the fifteenth century, in neighboring Ancona, notaries public were so busy drafting and registering contracts that they left a voluminous paper trail. Peter Earle ties the expansion of the port of Ancona directly to the role played by these legal-service providers.⁹²

In a useful discussion of notaries in modern economies, Benito Arruñada distinguished between what he called 'civil law notaries,' and simple notary publics performing as glorified witnesses. He saw them as playing two interrelated functions. First, they certified documents to authenticate their public legitimacy (*fides publicae*); and second, they acted as enforcers of the law between contracting parties *ex-post* as enforcers of last resort outside of the courts. ⁹³ In this last instance, Arruñada likens civil notaries to legal "gatekeepers" or third party mediators.

By publicly authenticating and monitoring their legality, notaries give those documents in which they are involved a special evidentiary value as a result of their nature and uniformity. This produces valuable information that enables contract costs to be cut down, both private and public, as a result of the effect of the tendency to litigate, or litigiousness and the production costs of judicial services.⁹⁴

The existence of notaries, as public legal-service providers, reduced transaction costs between economic partners by providing third-party intermediation that preempted potential litigiousness and prevented the public and costly recourse to lawyers, judges and courts. Moreover, as Arruñada explains, notaries enabled the standardization of legal practice and in turn, "the evidentiary standardization of notary documents" which he claims was as important to economic efficiency as was the application "principles of standardization in industrial development a century ago."⁹⁵

⁸⁹ John F. McGovern, "The Documentary Language of Medieval Business, 1150-1250." *The Classical Journal*, 67:3 (1972), 230.

⁹⁰ John F. McGovern, "The Documentary Language of Medieval Business, 1150-1250." *The Classical Journal*, 67:3 (1972), 227-239.

⁹¹ Hilmar C. Krueger, "The Wares of Exchange in the Genoese-African Traffic of the Twelfth Century." *Speculum*, 12: 1 (Jan, 1937), 57-71.

⁹² Peter Earle, "The Commercial Development of Ancona, 1479-1551." *The Economic History Review*, 22:1 (Apr., 1969), 28-44.

⁹³ Benito Arruñada, "The Economics of Notaries," European Journal of Law and Economics 3, (1996), 5-6.

⁹⁴ Ibid., 8.

⁹⁵ Ibid., 9.

An additional economic efficiency that was afforded by the notarial system in modern Europe was their function in dealing with problems of information asymmetry; a function that Arruñada mentions, but Hoffman, Postel-Vinay and Rosenthal underscore.⁹⁶ Relying on the services of notaries for oversight and enforcement of contractual agreements, these authors argue convincingly, was a means to deal with the serious problem of default in a much more cost-effective manner than through the use of courts.⁹⁷ What is particular remarkable about their findings is that notaries, in their capacity as financial and legal intermediaries, were agents of impersonal exchange making the credit market no longer confined to relationships of family, kin, friend, neighbor and trusted partner. Rather the "favorite notary" acted as a go-between linking potential debtors and creditors or borrowers and lenders. Because of "their knowledge of their clients," notaries succeeded in generating large amounts of capital that could be placed in the hands of nineteenth century entrepreneurs in the form of long-term loans.⁹⁸

But while these authors emphasize the role of notaries as financial intermediaries who solved problems of information asymmetry, they neglect to recognize to what extent notaries' roles were pivotal in a more fundamental way, as authenticators of written documents such as contracts, and official or public witnesses who validated documentation. In essence, by placing his official seal on documentation, the licensed notary public placed faith in paper. It is worth mentioning that nowhere in their publications on the role of notaries do Hoffman, Postel-Vinay and Rosenthal define the profession of notary or link it to the legal and public institutions in which these legal service providers were embedded. While their focus is on the neglected financial services of these intermediaries, they fall short of recognizing that notaries were first and foremost public figures authenticating contracts, deeds and depositions who were licensed by the state. Their roles as legal-service providers gave them legitimacy through publicly-sponsored reputations, and so they operated in era when faith in paper was guaranteed by state institutions.

⁹⁶ Philip T. Hoffman, Gilles Postel-Vinay and Jean-Laurent Rosenthal. "What do Notaries do?. Overcoming Asymmetric Information in Financial Markets: The Case of Paris, 1751," *Journal of Institutional and Theoretical Economics*, 127:3 (1998), 499-?.; see also their "Information and Economic History: How the Credit Market in Old Regime Paris Forces Us to Rethink the Transition to Capitalism." *American Historical Review*, 104:1, 69-94; See also their *Priceless Markets: The Political Economy of Credit in Paris*, *1660-1870* (Chicago: Chicago University Press, 2000).

⁹⁷ Hoffman, Postel-Vinay and Rosenthal, "Information," 79-80.

⁹⁸ Ibid, 87.

Conclusions

The commercial world of Muslims caravan traders in the North and West Africa depended upon "the paper economy of faith." Paper was not manufactured locally, and so Muslims went to great lengths to secure a regular paper supply. They relied on Arabic literacy and writing paper to document their various contracts and partnership agreements to conduct their caravanning businesses. In this region where no political authority ruled supreme, access to paper and locally defined Islamic legal norms provided long-distance traders with a semblance of economic order. Literate merchants and traders relied on legal-service providers, such as qādīs and muftīs, who defined the rules of the game, deliberating, mediating, and enforcing transactions and contracts. Contracts drafted with precision and in legally prescribed language reduced ambiguity and otherwise reduced the costs of engaging in the otherwise highly risky business of trans-Saharan caravan trade. The commonality of written contracts between family members stands in contradistinction to prevailing theories about the operations of family-based trade networks. It supports Kuran's insight that trust was not a given between families members and explains why the paper economy resolved uncertainties in trade even within families.⁹⁹ Obviously such contractual arrangements solved commitment problems or else they would not have endured with such frequency.

Muslim traders followed to the letter the Quranic verses enjoining them to commit their contractual agreements to writing and to draft with precision so as to ensure transparency and avoid disputes. But as Tyan identified decades ago in his study of the organization of justice in the Muslim world, "such a system contained a grave practical inconvenience."¹⁰⁰ Indeed, Islamic legal systems inhibited the development of a more efficient institutional framework by failing to invest paperwork with legal personality. This was all the more paradoxical given the emphasis on literacy and writing in Islam. This lack of faith in paper, probably constituted a fundamental obstacle to the development of Muslim economies preventing the growth of 'paper companies,' such as joint-stock companies or corporations as well as the development of complex and largescale enterprise in commerce, industry, and for obvious reasons, in the key sector of banking. It also may explain why Muslim societies never adopted more sophisticated financial instruments, such as paper money, that would have promoted the fluidity of exchange.

⁹⁹ Kuran, "The Islamic Commercial," 418 and 420.
¹⁰⁰ Tyan, "Le Notariat," 11