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BEES IN THE MEDIEVAL MAGHREB: WAX, HONEY AND CROSS-CULTURAL TRADE IN THE WESTERN MEDITERRANEAN

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ABSTRACT:

Believed to originate in Paradise and set apart in their chastity, bees were potent religious symbols in medieval Christianity and Islam. This article explores how these beliefs drove an extensive trade in wax and honey, and the role of Jews, conversos, Christians and Muslims in this trade. Further, it considers the environmental context and the extent to which religious prohibitions against trade between Christians and Muslims may have provided economic opportunities for Jewish merchants, while examining the economic and cultural relationships between members of the three Abrahamic religions.

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In 1402 a boat docked at the Grau, the port for the city of Valencia, carrying a shipment of goods from the kingdom of Tlemcen. Among these were two costals of wax owned by Jucef Benluba and Pau Maçana. The wax had been collected in North Africa and sent from Oran in modern-day Algeria to Valencia where it sold for 1176s. 6d.—almost as much as the 32 costals of hides sent in the same shipment. That same year, Jucef Benluba sent another shipment containing North African wax to Valencia, this time in partnership with Gabriel Ballester who had himself already received a shipment of wax that year from a merchant based in Honaine.² These entries from a Valencian import tax known as the *dret del vintè* are not exceptional for their commodities, values or actors. What stands out about them is how ordinary they were, for wax was one of the principal commodities traded out of the Muslim Maghreb to the Christian lands to the north. Transactions such as these were deeply embedded in the economy of the medieval Mediterranean. But they were also just as deeply rooted in the political, cultural and religious milieus of the region, as well as its diverse landscapes and ecosystems. Consideration of this trade and commodity provides insight into the merchant networks particular to this part of the Western Mediterranean, which brought together Muslims, Jews, conversos and Christians to feed a voracious demand for wax fuelled by Christian worship. This article will first discuss the specific context of the *dret del vintè* and the merchants recorded in it. Second, the environment of the Maghreb and the ecological relationships between its principal export commodities will be considered. Finally, the religious and cultural role of bees and bee products in medieval Christianity and Islam will be discussed. By demonstrating the ways in which economy, environment and culture were inextricably intertwined, this paper will show how cultural expression offered opportunities for economic encounter and exchange in the medieval Mediterranean.

The story of the trading partnerships between Jucef Benluba, Pau Maçana, Gabriel Ballester and many others like them begins with the catastrophe of 1391, when a wave of violence was unleashed against the Jews of the Crowns of Castile and Aragon. On the ninth of July 1391 the Jewish quarter of Valencia, its *aljama*, was attacked by an angry mob of Christians—one of the many Jewish quarters to succumb to the sudden violence which erupted that year. In subsequent days the Valencian Jewish *aljamas* of Alzira, Xàtiva, and Castelló among others were also attacked. Of the perhaps 2,500 Jews who had been living in the city of Valencia, less than one tenth avoided conversion or death, remaining in the castle in which they had taken refuge until the early part of the next year. The rest were either killed or, much more commonly, converted through force or fear. In the wake of the violence of 1391, the city and the kingdom were left with a large group of new, unwilling Christians, many of whom preferred to escape across the sea to North Africa where they could live as Jews, among their extended familial, commercial and social networks.³

² Leopoldo Piles Ros, 'El dret del XXe e XXXXe: Para favorecer las relaciones comerciales de los judíos nor-africanos con el Reino de Valencia, 1393-1495', *Sefarad* 44 (1994), 234 ref. Arxiu del Regne de València Mestre Racional (ARV M.R.) 21 f.286v, 285v, 287r,v.

³ See e.g. Mark D. Meyerson, *A Jewish Renaissance in Fifteenth-Century Spain* (Princeton, 2004), 23-28; José Hinojosa Montalvo, 'Los conversos de judío Valencianos en el siglo XV: Entre el desarraigo y la asimilación', in *La Península Ibérica en la Era de los Descubrimientos, 1391- 1492. Actas de la III jornadas hispano-portuguesas de historia medieval* (Seville, 1997), vol. 1, 69-78.

The attacks on the aljamas in 1391 left the Crown with a number of practical problems. The destruction of a community which had hitherto provided Joan I with a steady flow of income through taxation was difficult for a king whose finances had always been stretched. Faced with the continued loss of this income through conversion and flight, he took action to support and stabilize the Jewish communities of the Crown. In 1392 Joan revoked earlier legislation by which Jews were obliged to have all contracts registered by a single notary—an act which had been aimed at facilitating fiscal extraction by the Crown—and issued a wide-ranging pardon for Jews involved in criminal cases.⁴ To encourage trade, and even the return of Jewish merchants who had fled, safe conducts (*guiatges*) were granted to Jews wishing to travel between North Africa, Valencia and Mallorca. In 1393, Fuxen Abdulfach, formerly of Mallorca and now resident in the Maghreb, was granted a *guiatge* to come to Valencia to trade. His partner in this venture was the Valencian converso Pere de Montcada.⁵ Partnerships between conversos and North African Jews were an especial feature of Valencian trade in the first generation of those converted in 1391.⁶ This early example provides insight into another problem created by the destruction of the aljamas and the mass conversions which followed: the thousands of New Christians who had been baptised under extreme duress and who showed a disturbing tendency to flee to North Africa and practice their old religion.⁷ This converso population was a source of both economic and moral concern, for Joan was obliged to ensure that the New Christians remained Christian. To allow them to travel across the sea and return to Judaism would be to facilitate apostasy, but they also took with them their knowledge, networks, and wealth.⁸ It was crucial, then, that the king find ways of continuing to exploit conversos financially while still accepting them as Christian.

The first step was to stop the movement of conversos out of Crown lands. This proved difficult to administer and hindered precisely the commercial exchange the king wanted to facilitate. In addition to forbidding Jews, Muslims and conversos from leaving the Crown permanently, conversos were also not allowed to travel to North Africa unless they left their wives and children under the age of 15 as surety—a prohibition so onerous it was revoked in 1399 by Martí the Humane.⁹ The years immediately following the violence of 1391 were therefore marked by tension between competing needs of the Crown on one hand, and Valencian conversos and their North African Jewish counterparts on the other.

It was in this peculiar environment that the *dret del vintè*, the tax of the twentieth, was promulgated under Joan I. This tax was levied against goods brought by Jewish merchants

⁴ Meyerson, *A Jewish Renaissance*, 31.

⁵ Piles Ros, 'El dret del XXe e XXXXe', 217-282, 218; Dominique Valérian, *Bougie, port maghrébin, 1067-1510* (Rome, 2006), 45.

⁶ See for example María Dolores López Pérez, *La corona de Aragón y el Magreb en el siglo XIV: 1331-1410* (Barcelona, 1995), 373. In Mallorca in the middle of the 14th century these partnerships were characterized by strong familial connections. The agent of Hacon, a Jew of Argel, was his son, Magalluf Abuba, living in Mallorca: López Pérez, *La corona de Aragón y el Magreb*, 362.

⁷ For example, the sons of Jacob Façan and David el Rau of Morvedre: Meyerson, *A Jewish Renaissance*, 185. 1392 was the peak year of converso flight. Pere Pardo, Martin de Torres, Gabriel Fonollsa, Manuel de Proxida and Nicolás Marrades were all caught trying to flee: José Hinojosa Montalvo, *The Jews of the Kingdom of Valencia: From persecution to expulsion, 1391-1492* (Jerusalem, 1993), 15.

⁸ José Hinojosa Montalvo, *Jews of the Kingdom of Valencia*, 14.

⁹ López Pérez, *La corona de Aragón y el Maghreb*, 333.

from North Africa in exchange for safe conduct, and was meant to encourage Jewish trade between North Africa, Valencia and Mallorca in the wake of 1391.¹⁰ The tax represented a halving of the tenth (the *deè*) traditionally owed, and was reduced to a fortieth for goods such as grain, precious metals and stones.¹¹ The records of this tax for Valencia survive with many gaps between 1393-1495 and typically include the name of the Jewish merchant, their place of origin (occasionally with further biographical detail, as with Samuel Fatuen, originally of Mallorca but living in Oran and trading to Valencia in 1395), the goods which were shipped, their quantity and value, the tax paid and the date on which it was paid.¹² The Valencian factor or business partner is also periodically noted with regard to the proportion of the shipment they owned—typically two thirds, but sometimes half.¹³ Very occasionally, the patron of the ship in which the goods were sent is also mentioned, such as the shipments of Isaac Almahle in 1409, which were carried in the galleys of Arnau Cardona (who in 1410 also carried the merchandise of David Suçi) and Antonio Celles.¹⁴ Although the entries become less detailed over the course of the fifteenth century, when less attention was paid to noting down the exact commodities and their values, the entries of the *dret del vintè* offer important insight into the trading networks of Jewish merchants working between North Africa and Valencia.¹⁵

Many of the Jews from Valencia and Mallorca had fled to Honaine and Oran in the kingdom of Tlemcen where they had already strong commercial links, for the central Maghreb was the preferred trading zone of the Mallorcan and Valencian merchant communities more generally.¹⁶ The records of the *dret del vintè* demonstrate how the violence of 1391, and the continued flight of the Jews from the Crown of Aragon into North Africa, may in fact have strengthened the ties between the Jewish communities of both coasts of the Mediterranean. This is evident in the particular relationships between conversos based in Valencia and Jewish merchants from North Africa.

¹⁰ The original issuance of the *dret del vintè* has not survived for Valencia, but it is preserved for Mallorca. See Yitzhak Baer, *Die Juden im Christlichen Spanien: Urkunden und Regesten* vol. I (Berlin, 1929), 724-26. A comprehensive overview of the tax is given in Piles Ros, 'El dret del XXe e XXXXe'.

¹¹ Relaxations in the taxed owed by Jewish merchants were not new in the later fourteenth century; the difference under Joan I was that the reduction was made permanent—an indication of the financial concerns aroused by the events a few years earlier. This was extended to Muslims in 1399: López Pérez, *La corona de Aragón y el Magreb*, 333, 355-66; its further application to Jews from other regions such as Castile and Italy is evident from the entries of Jewish merchants from these places from the early fifteenth century: Piles Ros, 'El dret del XXe e XXXXe', 222.

¹² Piles Ros, 'El dret del XXe e XXXXe', 233.

¹³ See also López Pérez, *La corona de Aragón y el Magreb*, 371-372.

¹⁴ The rarity of such entries leaves open the question of which ships were preferred by Jewish merchants based in the Maghreb. Although it is suggested they may have preferred the relative neutrality of Venetian ships to those of Iberia: Piles Ros, p.222; see also Jacqueline Guiral, 'Les relations commerciales du Royaume de Valence avec la Berbérie au XV^e siècle', *Mélanges de la Casa de Velázquez* 10 (1974), 103.

¹⁵ Discussion of the source, merchants and commodities are derived from Piles Ros, 'El dret del XXe e XXXXe'.

¹⁶ Mallorcan Jews were already leaving for North Africa by the middle of fourteenth century: Lluís Tudela Villalonga and Jordi Maíz Chacón, 'Els mercaders jueus mallorquins a meitat del segle XIV', in *La Mediterrània de la Corona d'Aragó, segles XIII-XVI & VII Centenari de la Sentència Arbitral de Torrellas, 1304-2004: XVIII Congrès d'Història de la Corona d'Aragó, Valencia 2004, 9-14 Setembre*, vol. 1, ed. Rafael Narbona Vizcaino (Valencia, 2005).

The commercial dealings of Gabriel Ballester are typical of these partnerships. In 1401 he was working with Salamo Suçen of Honaine, who was also bringing goods to Valencia in partnership with Nicolau Valldaura.¹⁷ Gabriel owned a quarter of the shipment, while Nicolau and Salamo shared the rest, of which Nicolau had a quarter and Salamo three quarters. The partnerships are recorded precisely because of the complications arising from involving one person—Salamo—who owed the vintè, and two people who did not—the converso merchants Gabriel and Nicolau. That same year Gabriel was also working with Faraig Benmuça of Honaine, who again was bringing a shipment which included goods for Nicolau Valldaura, including a rather complicated division of 69 costals of dates. The following year he was working with Jucef Benluba of Oran to bring a shipment of cochineal and wax to Valencia. Jucef was also involved with Pau Maçana, a converso who had initially fled to North Africa but had returned again to Valencia under the reign of Martí the Humane, and who partnered with Bonjuha Douha of Honaine.¹⁸ In addition to Faraig Benmuça, Salamo Suçen also worked with the Valencian converso Gabriel Vives, who in turn also traded with Abrafim Arquet of Oran, a contact made through a previous trading relationship with Abrafim's brother, Jacob, before the latter's move to Mallorca.¹⁹ Involvement of Mallorcan converso merchants in Valencia is also evident, as in the case of Francesc Pardo, a converso of Mallorca trading in Valencia, and among whose factors were Fahim Caxari of Tunis and Samuel Nadiri of Mostaganem. For at least the first generation after 1391, commercial contacts between conversos of Valencia and Jewish merchants of the Maghreb remained strong, reinforced by familial and communal ties, and encouraged by the fiscal policies of the Crown.²⁰

What these partnerships have in common, apart from the relationships between converso and Jewish merchants and the division of the goods between them, is that all these merchants were involved in shipping wax into Valencia. Largely excluded from the trade in grain from North Africa to Valencia, Jewish merchants worked on a smaller scale, sending a wide variety of raw and manufactured products from North Africa and the Levant to Valencia.²¹ Of these, the most common was wax.

¹⁷ See Piles Ros, 'El dret del XXe e XXXXe'; Jewish trade between North Africa and Valencia was dominated by five converso merchants: Nicolau Valldaura, Pere de Moncada, Pere Maçana, Gabriel Vives and Gabriel Ballester: Hinojosa Montalvo, 'Los conversos de judío valencianos en el siglo XV', 84.

¹⁸ Meyerson, *A Jewish Renaissance*, 44.

¹⁹ Lopez Perez, *La corona de Aragón y el Magreb*, 368; for a broader survey see José Hinojosa Montalvo, 'Judíos extranjeros en el reino de Valencia durante la Baja Edad Media', *Sefarad* 70 (2010), 69-115.

²⁰ See for example, the relationship between Galcerán Martí and Francesc Pardo: Pau Cateura Bennàsser, 'Valencia y Mallorca en el siglo XV', *Mayurca* 26 (2000), 188; the Suçi family based in Fes, Sicily and Trapani: Jacqueline Guiral, 'L'apport des communautés juives et musulmanes et commerce maritime de Valence au XV siècle', *Économies méditerranéennes. Équilibres et intercommunications, xiiiè-xixe siècles. Deuxième colloque international d'histoire du Centre de recherches néohelléniques* (18-25 septembre 1983) (Athens, 1985), 461-474; for the general importance of family ties Eleazar Gutwirth, 'El comercio hispano-magrebí y los judíos (1391-1444)', *Hispania* 159 (1985), 191-207. Frequent coming and going between the Jews of Morvedre and north Africa with their families to deal with marriages and inheritances is also attested: Piles Ros, 'El dret del XXe e XXXXe', p.226-7.

²¹ Hinojosa Montalvo, 'Judíos extranjeros', 85. There were exceptions to this: Magaluf Faraig worked with Daniel and Rafael Pardo of Mallorca, and Galip Ripoll and Galceran Martí of Valencia to import grain to Valencia in 1426; Jucef Cesportes partnered with Gabriel Vives to bring wheat: Piles Ros, 'El dret del XXe e XXXXe'. The converso Galceran Martí was also associated with the Datini: Ingrid Houssaye Michienzi,

Wax was one of the major commodities of North Africa, along with hides, grain, wool, and gold.²² Barbary wax found ready buyers—indeed, throughout the fourteenth and fifteenth centuries the markets of the Mediterranean were flooded with this ‘cera barbaresca’. In this trade, at least to Valencia, Jewish merchants seem to have been quite active and these shipments could be substantial. In 1409 alone, Isaac Almahle of Fez—one of the few North African Jewish merchants conducting their Valencian business without involving conversos—imported over 6,000kg of wax in three shipments which sold for 925*l*. The following year Davi Suçi of Fez imported well over 2,000kg of wax. Indeed, the average shipment of wax sent by North African Jews to Valencia weighed 668kg.²³ Many of the entries for wax are listed by volume rather than weight, but an indication of their real-world value can be seen in comparing the amount for which the shipments sold—the value upon which they were taxed—and the amount of wage labour that this represented. On average, between 1393 and 1409 a kilogram of wax shipped from North Africa and sold in Valencia was worth between 0.62 and 1.2 days’ work for a master mason in the city.²⁴ The unknown quantity of wax shipped by Abraffim Arquet to Gabriel Vives represented 111 days’ labour for a master mason—and 200 days’ labour for his helper, while the eight *panes* of wax sent by various Jews of Berbería to Pere Maçana were worth the equivalent of 2,347 days’ labour of a master mason. On average, each shipment of wax was worth the equivalent of 413 days’ wages for this labour.²⁵

In scale and value, therefore, the wax trade into Valencia was significant. Yet Valencia was only one of the thousands of cities, towns and villages into which Barbary wax flowed.²⁶ The importance of the Maghreb as a wax production zone is well known, and wax was ubiquitous in the holds of ships sailing from North Africa to ports along Mediterranean.²⁷ The reasons for this are twofold: the demand-side pulls of Christian Europe, and the supply-side impetus from the Muslim Maghreb. In the combination of these factors can also be seen the impact of Christian culture along the southern coasts of the Mediterranean.

Datini, Majorque et le Maghreb (14e-15e): réseaux, espaces Méditerranéens et stratégies marchandes (Leiden, 2013), 130.

²² North Africa was also a staging post for goods from the Levant, from which came many dyestuffs for the textile industries of Europe. The slave trade was also important in this region: Jacqueline Guiral, ‘Les relations commerciales’, 112.

²³ Covering the years 1398-1422 in the *dret del vintè* (1422 is last date of import with weights noted). In this context, it is of note that Jewish and converso merchants were also active in the wax trade with the Datini: Houssaye Michienzi, *Datini, Majorque et le Maghreb*, 431-435.

²⁴ Price and wage data from Robert C. Allen, ‘Prices and wages in Valencia 1392-1812’, Consumer Price Indices, International Institute of Social History, <http://www.iisg.nl/hpw/data.php#europe> (accessed 18 Dec. 2016). Mason’s wages used because of availability of wage data; a master mason’s wages were on average 40% higher than those of his helpers. The former is likely indicative of a high-waged skilled worker, the latter of a low-waged relatively unskilled worker. Wheat prices are not available for the earlier part of the data series, but as an indicative example, the cost of wax sent by Samuel Nadiri to Francesc Pardo in 1412 sold for 23*l*. 17s. 10d., the equivalent value of 1,960 litres of wheat.

²⁵ Using years in which wax was valued separately; wages interpolated for 1401, 1405, 1418.

²⁶ The volume and value of this trade and the international importance of Maghrebi wax is currently under study for the project ‘Bees in the Medieval World’.

²⁷ See for example López Pérez, *La corona de Aragón y el Magreb*, 556.

Wax candles were necessary for the proper observance of the Christian mass, and beeswax was used to light altars in churches across Europe during the Middle Ages.²⁸ In parish churches in England during the fifteenth century, provision of wax candles was the largest single expenditure outside of maintaining the fabric of the church, and in the fourteenth and fifteenth centuries wax accounted for almost half of the annual expenditure for the main chapels in larger religious foundations. Westminster Abbey and Canterbury Cathedral purchased on average about 630kg of wax a year to provision their main chapels.²⁹ Closer to home, the *Lluminària* of the cathedral of Barcelona, the office charged with handling celebrations related to Corpus Christi and the Holy Body, including the monstrance in which the consecrated Host was displayed, bought on average 464kg of wax annually between 1427 and 1447, in addition to the wax purchased by the main sacristy (the *Sagristia Major*).³⁰ In addition to these offices, wax was also consumed on the altars of numerous ancillary shrines and chapels, given as oblations from the faithful, and as candles for tombs and life-cycle events. The virginity of Mary, symbolically connected to the medieval understanding of the chastity of bees, was remembered through the blessing of wax candles at the Feast of the Purification—commonly called Candlemas in England, and variations of Candelaria in Iberia.³¹ The symbolic body of Christ was made visible in the Paschal candle, its ritual lighting on Holy Saturday, extinguishing on Maundy Thursday, and lighting again at the Easter Vigil. Christian life was marked through burning candles, the Christian year celebrated through burning candles, the Christian message conveyed through burning candles. Medieval Christian society required a constant supply of vast quantities of wax to support this unceasing demand.

This demand was partially met through domestic production. Beekeeping was a common activity across Europe, adapted to the wide range of habitats in which *Apis mellifera*, the European honeybee, lived. The various forms of beekeeping are indicative of climate, vegetation, landscape and patterns of land use in medieval Europe. While small-scale beekeeping in woven skeps was practiced in largely forest-free and rain-soaked England, tree beekeeping was practiced in the heavily forested hinterlands of the Baltic with their long, cold winters.³² In Iberia there was a marked preference for cork hives, which were well adapted to the intense summer heat. Additionally, the relatively light weight of these cork hives facilitated transhumant beekeeping, in which the hives were moved between seasons to new foraging grounds, ensuring a steady supply of flowering plants and

²⁸ Religious use of wax in churches is discussed in Alexandra Sapoznik, 'Bees in the medieval economy: religious observance and the production, trade and consumption of wax in England c.1300-1555', *Economic History Review* 72 (2019), 1152-1174, esp. 1152-1154.

²⁹ Canterbury Cathedral Archives, DCc-Sacrist/6-75; Westminster Abbey Muniments, 19621-807.

³⁰ The *Lluminària* bought 759.8kg of wax in 1445. Wax consumption of the *Lluminària* and its relationship with the *Sagristia Major* is discussed in Lluís Sales i Favà and Alexandra Sapoznik, 'The production and trade of wax in north-eastern Iberia, XIV-XVIc. The case of Catalonia' in David A. Wallace-Hare, (ed.) *New Approaches to the Archaeology of Beekeeping* (forthcoming 2021). The presence of two offices handling wax consumption within the cathedral indicates the importance of this commodity.

³¹ For example, on the virginity of bees: Augustine, *De Civitate Dei*, book 15, chapter 27; Isidore of Seville, *Etymologiarum sive originum libri XX*, book 12, chapter 8:1-3; for the relationship between the bees and Mary, see for example Thomas Kelly, *The Exultet in Southern Italy* (Oxford, 1996), 65-69.

³² Eva Crane, *The World History of Beekeeping and Honey Hunting* (London, 1999), 128-135, 251-257.

encouraging higher rates of honey production.³³ Such close attention to finding suitable bee forage clearly paid dividends. Locally produced wax, such as that from the region of Tortosa and the Lower Ebro, was a high quality product routinely imported into Barcelona, and which the Cathedral actively sent agents to purchase.³⁴ Writing in the late sixteenth century, Agustín Horozco believed Valencian wax (along with that of Venice) to be of the highest quality.³⁵ So conducive to beekeeping was the environment of the Mediterranean that honey was harvested two or even three times a year.³⁶ The high levels of honey production in the region are also indicative of large quantities of wax production—particularly in comparison with areas of northern Europe where small quantities of honey were harvested once every two years. Yet nowhere along the Christian coasts of the Mediterranean was demand for wax met by local supply, and almost every ship leaving the ports of the Maghreb bound for Europe carried shipments of wax in their holds.³⁷

The magnitude of the trade still needs to be fully quantified to understand the true economic, cultural and social importance of beeswax, but it is clear that demand from Christian Europe drove an extensive and valuable international trade in this commodity. To understand the role of the Maghreb in this trade, both the ecological and cultural environments in which beekeeping occurred in this region must be considered. As noted above, the Mediterranean zone provided an ideal setting for large-scale beekeeping. Part of this was simply because the temperatures were typically conducive to keeping bees fed and warm over winter. But beyond this, the vegetative landscapes played an important part. A clue to the plant life of this region is found in two other major commodities of international trade from this zone: the skins and wool that were mainstays of Maghrebi trade into Europe.³⁸ Hides and wax were traded from the same places and along the same routes, by volume they were the most significant raw materials exported, and both were ubiquitous in cargoes leaving North Africa.³⁹

³³ See for example in the Crown of Aragon and Castile, Desideri Lombarte Arrufat and Artur Quintana i Font, 'L'apicultura tradicional a Pena-roja', *Alazet* 1 (1989), 73-97; Guy Lemeunier, 'Viajes de abejas: La trashumancia apícola en la Cataluña norte (s. XIX)' in J. L. Castán Esteban and C. Serrano Lacarra (eds.), *La trashumancia en la España mediterránea: historia, antropología, medio natural, desarrollo rural* (Zaragoza, 2004) 387-404; José María Sanchez Benito, 'Datos sobre la organización de la producción apícola castellana en la baja Edad Media', *Estudis d'Historia Economica* 1 (1989) 19.

³⁴ Sales i Favà and Sapoznik, 'The production and trade of wax in north-eastern Iberia'.

³⁵ Agustín de Horozco, *Historia de la ciudad de Cádiz* (Madrid, 1895), 173. Horozco, viewing North African commodities from its exports, noted that there was little honey in the region but that hides and leather came in great quantity: 'muchas cabrunas, cueros curtidos i al pelo, cordovans, tafiletos, fileles, calbornozes, i muy curiosas bolsas de cuero para traer diners, para el arzon i para enfriar agua', 178.

³⁶ The first honey was particularly prized: Giovanni Canova, 'Api e miele tra sapere empirico, tradizione e conoscenza scientifica nel mondo arabo-islamico', in G. Canova (ed.), *Scienza e Islam* (Rome, 1999) 22; Leo Africanus noted a late autumn honey harvest in October, and in Tagodast in the kingdom of Fes he described white and yellow honey, which may indicate two different harvests, the early, whiter harvest and the later, darker one: Leo Africanus, *The History and Description of Africa*, ed. R. Brown, trans. J. Pory (Cambridge, 1896) vol. I book 1, p.175, vol. II book 2, p.301.

³⁷ See e.g. López Pérez, *La corona de Aragón y el Magreb*, 556.

³⁸ Michienzi, *Datini, Majorque et le Maghreb*, 215.

³⁹ For example, Morocco was a particular centre of production for both commodities, and areas like the Gharb were particularly important: Michienzi, *Datini, Majorque et le Maghreb*, 215. The anonymous Catalan merchant whose handbook has been preserved and published by Gual Camerena described hides from Fez, Rabat, Alcoll and Bône as 'buenos': see also López Pérez, *La corona de Aragón y el Magreb*, 556, 552. Wax

The physical, botanic, and hydraulic landscapes of the Maghreb are highly complex, and can only be discussed in general terms here. Broadly, the northern part of the region is dominated by the Rif, Middle Atlas and Tell Atlas mountain ranges, which stretch from Morocco to Tunisia. To the south lie the Saharan Atlas. The Rif-Tell region, stretching between Tangiers and Bizenta and including the important medieval entrepôts of Fes, Oran, Mostaganem and Honaine, is an area of Mediterranean dry woodlands and forests—although the extent to which the region was, is, and should be forested is much contested. It is, to be certain, an area with large zones of cork oaks and arboriculture.⁴⁰ But it is also a denuded landscape. The most important feature of the environment of the medieval Mediterranean was the constant deforestation to which it was subjected.⁴¹ Removal of large shade-giving trees increased evaporation, allowed more sunlight to reach the ground, and increased the rate of soil erosion. Much of the Mediterranean plantscapes of this region are dominated by associations of holm oak (*Q. ilex*), and different zones are also home to large swathes of palmetto, wild olive, argan, and thuya.⁴² The plants which thrive in such conditions are dense, shrubby associations, known as maquis or garrigue which are associated with plants such as rosemary, cistus, kermes oak, juniper and lavender. Garrigue plants in the eastern coastal plain of Oran include cistus, lavender, and asphodel—plants which provide excellent bee forage.⁴³ In northern Algeria, a plethora of flowering plants mean bee forage is available year-round. In areas of the Tell with greater precipitation, *Q. ilex* is associated with mastic, cistus, laurel and phillyrea.⁴⁴

This was a landscape created by pastoralism. Flocks and herds moved between summer and winter grazing lands, fire was used to burn away old brush to create new, more palatable and easy to access young growth, and the land was subjected to intense grazing. It is not a coincidence that this was also a zone of sheep and goat husbandry—both voracious animals that can eat down vegetation to the ground. Goats in particular are known for their intense grazing, and may be associated with particularly strong degradation, while sheep chew vegetation down so close to the ground in land-intensive pastoral regimes their grazing is to the detriment of cattle. Under constant fire and extensive grazing, a

from Tunisia was considered high quality by the Datini merchant Francesco di Bonaccorso: Michienzi, *Datini, Majorque et le Maghreb*, 27.

⁴⁰ The Maamora north of Rabat is home to cork oak forest; large argan stands formed a ‘dehesa-like’ system in southern Morocco: J.M. Houston, *The Western Mediterranean World: An introduction to its regional landscapes* (London, 1964), 663-666; Jacques Blondel, et al., *The Mediterranean Region: Biological Diversity in Space and Time*, 2nd edn. (Oxford, 2010), 232. See also Blondel et al., 118-124. Olive oil exports are of course another indication of arboriculture in the region: see for example, Tahar Mansouri, ‘Produits agricoles et commerce maritime en Ifriqiya aux XIIe-XVe siècles’, *Médiévales* 33 (1997), 131-32.

⁴¹ On the impact of pastoralism on vegetation and deforestation see for example: P. Quetzal, ‘Matorrals’ méditerranéens et ‘Chaparrals’ californiens: Quelques aspects comparatifs de leur dynamique, de leurs structures et de leur signification écologique’, *Annals of Forest Science* 36 (1979), 8.

⁴² Houston, *The Western Mediterranean World*, 665; it is also noted that a predominance of palmetto leads to ‘a distinct trait of landscapes that are ablaze in spring with colours of herbaceous plants.

⁴³ Houston, *The Western Mediterranean World*, 87; prevalence of rosemary around Oran and Mostaganem noted in Svante Murbeck, *Contributions à la connaissance de la flore du nord-ouest de l’Afrique: et plus spécialement de la Tunisie* (Lund, 1897), 33 which also notes the use of fire in the Djebel bargou mountain region, to keep vegetation low, 11.

⁴⁴ Houston, *The Western Mediterranean World*, 664.

blooming garrigue landscape emerged.⁴⁵ Such landscapes, with their thin soils, often appearing on slopes, are not conducive to arable agriculture. They are, however, filled with abundant forage for livestock—and bees. It may therefore be suggested that within the Mediterranean basin the two occupations were not only complementary, but were in fact intertwined, an aspect of pastoralism which merits further consideration across the region.⁴⁶ This connection was made by Leo Africanus, the former al-Hasan ibn Muhammad al-Wazzan al-Fasi, when he noted that in the of mountains of Morocco there was a great deal of honey, goats, and argan oil; that ‘Ileusugaghen’ in the area of Haha in Morocco was barren except that the mountains ‘abound greatly with honey’; at ‘Tefethne’ Portuguese merchants came to buy goatskins and wax; at Agla the merchants of Fes came to buy ox hides, wool and wax ‘which are the principal commodities of the place’; and at Collo Genoese merchants came to buy the ‘abundance of wax and hides’ making it the wealthiest city in Tunis.⁴⁷

We may assume that most of this beekeeping took place in hives—perhaps utilizing the cork oaks of the northern part of this region or the date palms of the south. Taking only a sample of the cases from North Africa, frequent mention is made of beekeeping with reference to hives or otherwise indicating domestic beekeeping rather than wild honey hunting in the *Mi'yar* of al-Wansharisi. In response to whether it was permissible to use wheat to buy bees without honey, Abu Ali al-Qarawi of Fes responded in the ninth century with reference to hives, even noting the bees’ need for honey over winter. Centuries later, Abd Allah al-Abdusi, also of Fes, responded to a question about the sale of half of ten beehives and the care of the other half, noting that the hives had first to be examined and that the sale of the hives could not stipulate the requirement to look after the hives which the owner retained; in fourteenth-century Bougie (Béjaïa), Al-Waglisi commented on hives operated by workers; and al-Wansharisi himself noted in the fifteenth century that it was possible for an apiary to be burnt while the keeper was smoking out the bees. In eleventh- or twelfth-century Kairouan Abu Imran al-Fasi issued a fatwah regarding sharecopping bees, as did Abd Allah Al-Sharif b. Abi Abd Allah Al-Sharif Al-Tilimsani in fourteenth-

⁴⁵ Many of these plants are pyrophytes (adapted to fire regimes) such as white asphodel, cork oak, and, up to a point, Aleppo pine; or pyrophiles (requiring fire to reproduce) such as cistus.

⁴⁶ The relationship between deforestation and beekeeping is clear in Plato’s *Phaedo*, in which he wrote ‘some of our mountains can now only support bees’: quoted in John McNeill, *Mountains of the Mediterranean World* (Cambridge, 1992), 72; for the Rif as area of beekeeping and honey production, as well as pastoral husbandry of ovicaprines: McNeill, *Mountains of the Mediterranean World*, 128.

⁴⁷ Leo Africanus, *The History and Description of Africa*, vol. 2, p.226, 234, 243, 501. Agla was also apparently a place with many lions: vol. 3, 703. None of this is to say that beekeeping did not take place in areas of cereal agriculture or viticulture: parts of Morocco abounded with barely, honey and goats (vol. 1, 278); in the Kingdom of Fes there was a region with great amounts of oil, vines, and particularly good honey (vol 1, 310); Mount Echebdeuon had honey, barley, and cattle (vol 2, 536); in the Kingdom of Tlemcen the market in Beni Rasid had ‘an abundance of cattle, corn, raisins, figs and honey’ (vol 2, 673). Yet even here, the tendency for livestock rearing to coincide with beekeeping in striking.

century Fes.⁴⁸ All of this points to an intensive apiculture that prevailed over the region. Indeed, Ibn Khaldun considered bees to be domestic animals like other livestock.⁴⁹

In this way, the large-scale trade in wool, hides and wax—a combination noted by Braudel for the sixteenth century as being produced in ‘all the coastal regions’ of North Africa—can be seen to demonstrate both economic adaptation to a manmade landscape, but also how these economic pursuits facilitated and perhaps encouraged environmental change.⁵⁰ Noticeably absent from this trio of commodities for export, but not in the fatwas, is honey.

Leo Africanus’ *Description of Africa* portrays a land full of honey. It was a staple food in Morocco, eaten for breakfast in winter. In Fes, bread fried with honey was a typical dish at wedding feasts, while fritters with honey and butter were sold in the markets. He notes that Melilla is so-called because of its abundance of honey. In Tlemcen, the mountain of Beni Abusaid near Ténès abounded with honey, while Tebecrit was known for its honey and carobs.⁵¹ Yet he also notes that in the Moroccan region of Haha there was ‘a great abundance of honey, which they use instead of ordinary food, but the wax they cast away little regarding it, because they know not the value of it’.⁵² In the barren region of Ileusugahen the mountains ‘abound with honey, which serves the inhabitants both for food and for merchandise to sell in the neighbour countries. And because they know not what service to put their wax unto, they cast it forth, together with the other excrements of honey’.⁵³ From the same Beni Abusaid from which much honey came, the people took their wax and hides to Ténès ‘and there sell the same to the merchants of Europe’.⁵⁴ Leaving aside the extent to which Leo Africanus’ description can be considered purely factual in its detail, it is noteworthy that he—who certainly knew the Maghreb—understood this to be a region of tremendous honey production. This honey was consumed locally, while the wax, which found little local use, was much sought after by Christian merchants.

The flowering landscape forged by extensive pastoralism was in places good for little other than livestock rearing and beekeeping, and apiculture was an important activity that helped make such land more economically productive. Demand for wax from Christian Europe may have pushed the inhabitants of the Maghreb to increase or intensify their beekeeping

⁴⁸ Vincent Lagardère, *Histoire et société en occident musulman au moyen age: Analyse du Mi'yar d'Al Wansarisi* (Madrid, 1995), 149, 162, 330, 340, 303, 338.

⁴⁹ Like sheep, cattle, goats, and silkworms: Ibn Khaldun, *The Muqaddimah: An introduction to history*, trans. F. Rosenthal, ed. N.J. Dawood (Princeton, 2005), 91; similarly regarding profit of these domesticated animals, noting honey from bees, but not wax: 299.

⁵⁰ Fernand Braudel, *The Mediterranean and the Mediterranean World in the Age of Philip II*, vol. 1, trans. S. Reynolds (London, 1972), 236.

⁵¹ Leo Africanus, *The History and Description of Africa*, vol. 2, book 2, p.226, 227; book 3, p.443-4, 448, 533, book 4, p.688, 664.

⁵² Ibid. vol. 2, book 2, p.226. A similar observation was made by the Venetian slave trader Alvise Cadamosto in the mid-fifteenth century of the region of Senegal, who wrote that he demonstrated how to make wax candles from honeycomb—an innovation which was roundly rejected: Alvise Cà da Mosto, *Navegações de Luiz de Cadamosto a que se ajuntou a viagem de Pedro de Cintra, capitão portuguez. Tr. do italiano* (Lisbon?, 18--), 42-3. With thanks to Lluís Sales i Favà for this reference.

⁵³ Ibid. 234.

⁵⁴ Ibid. vol. 2, book 4, p.688.

efforts to produce wax for export. But the Muslims of North Africa did not keep bees merely to satisfy Christian market.

Honey held a special place in medieval Islam, and Prophetic medicine placed great emphasis on its healing powers, both physical and spiritual.⁵⁵ Of honey, surah An-Nahl (The Bees) states that ‘there issues from within their bodies a drink of varying colours, wherein is healing for mankind: verily, in this is a Sign for those who give thought’.⁵⁶ Paradise was said to run with rivers of clear honey.⁵⁷ Several ḥadīth collected by ibn Majah demonstrate the protective and curative powers of honey: ‘Whoever eats honey three mornings each month will not suffer any serious calamity (*bala*)’; ‘You should take the two that bring healing: Honey and the Qur’an’; ‘Healing is in three things: A drink of honey, the glass of the copper, and cauterizing with fire’ (although the last was forbidden to Muslims).⁵⁸ Moreover, it was reiterated by both ibn Majah and al-Bukhari that the Prophet Muhammad enjoyed sweet foods and honey.⁵⁹ This religious and cultural emphasis on honey meant beekeeping was particularly important in medieval Muslim society.⁶⁰

In this context, the wax which bees produced to store honey was simply a by-product of an important commodity. This is, after all, the point Leo Africanus made in passing, when he noted that in some regions the inhabitants seem not to know the value of the wax. More accurately, they did not have the same urgent need for wax as did Christians.⁶¹ Despite this, the trade in wax to Christians was not without moral implications. It was widely known that Christians used vast quantities of wax in their religious observance, indeed that their religious observance depended on the use of wax candles.

The Pact of Umar, a text which takes the form of an agreement on the part of the Christians of Syria with Caliph Umar b. al-Khattab laying out the parameters of behaviour for the dhimmis living under Muslim rule, states: ‘We shall not go outside on Palm Sunday or Easter, nor shall we raise our voices in our funeral processions. We shall not display lights in any of the roads of the Muslims or in their marketplaces. We shall not come near them

⁵⁵ Bees were seen to demonstrate God’s omnipotence in their combination of sweet honey and sharp venom: Canova, ‘Api e miele’, 83.

⁵⁶ Qur’an 16:68-69

⁵⁷ Qur’an 47:15

⁵⁸ Muḥammad ibn Yazīd Ibn Mājah, Abū Ṭāhir Zubayr ‘Alī Za’ī, Nasiruddin Khattab, Huda Khattab, and Abū Khalīl, *English Translation of Sunan Ibn Mājah* (Riyadh, 2007), vol. 4, book 31, hadith 3450 (p.413); vol. 4 book 31, hadith 3452 (p.414); vol. 4, book 31, hadith 3491 (p.435). See also Muhammad M. Khan, *The Translation of the Meanings of Sahīh Al-Bukhari: Arabic-English* (Riyadh, 1997) vol. 7, book 76, chapter 3 hadith 5680 and 5681 (pp.326-7).

⁵⁹ *Sunan Ibn Mājah*, vol. 4 book 29 chapter 36, hadith 3323 (p.353); *Sahīh Al-Bukhārī* vol. 7, book 70, hadith 4531 (p.212); similarly vol. 4, book 74, chapter 10 hadith 5599 (p.289). It was also forbidden to kill bees: e.g. *Sunan Ibn Mājah* vol. 4, book 28, hadith 3224 (p.305).

⁶⁰ In Iberia see for example J.P. Monferrer Sala, ‘La miel en la España musulmana (al-Andalus)’ pt.1, *Vida Apícola* 46 (1991); J.P. Monferrer Sala, ‘La miel en la España musulmana (al-Andalus)’ pt.2, *Vida Apícola* 47 (1991); J. Aparici Martí, ‘De la apicultura a la obtención de la cera’, *Millars. Espai i Història* 21 (1998).

⁶¹ It is possible that Christian demand increased prices. Al-Makrizi (d.1442) commented that people no longer used wax because it was too expensive: Maya Shatzmiller, *Labour in the Medieval Islamic World* (Leiden, 1994), 204.

with our funeral processions [or: we shall not bury our dead near the Muslims]...⁶² In essence, Christians were forbidden from the public displays of religion to which they had been accustomed prior to Muslim rule. The inclusion of ‘lights’ (*niyran*) within the context of religious ritual may suggest that lighted candles or torches were a routine part of these Christian displays, and were especially rejected.⁶³

What then to do in lands overflowing with wax, when it was so clear why Christians were so desirous of it? The problem was brought to the attention of the legal scholar Abu Ishaq al-Shatibi, who was asked whether it was permissible for the inhabitants of al-Andalus to sell to the enemy things they might use as weapons. Further, if there was a prohibition on this, did it also extend to wax and to wax candles which were sold to apothecaries who might sell these on to Christians? He responded that, following al-Maziri, just because there were willing purchasers for various items did not mean there was permission to sell them—and that wax sold to Christians might be used for their religious practices. If the sale had already happened, it need not be cancelled, and simply selling candles to apothecaries was not itself impermissible. However, special attention should be paid to potentially deceitful apothecaries who might sell these on to Christians knowing that they would use them for religious practice.⁶⁴

It was theoretically prohibited, then, to sell wax to Christians because it was known that they were likely to use it for liturgical purposes and its sale could facilitate the practice of incorrect belief. Was the rejection of beeswax because of its close association with Christian religious devotion? Perhaps, but the experience was more complicated than this. For although Muslims rejected the Christian use of wax candles, candles did have a place in Muslim society.

In the *Mi'yar*, al-Wansharisi gives a question asked of al-Qabbab in Fes: To celebrate the Nativity of the Prophet (mawlid) teachers lit candles, and a tenth of the Qur'an and poems of praise were recited. Was it acceptable for the teacher to collect the price of the candles? It was onerous for the parents, who bought candles at the behest of their children, and the teacher was paid monthly in addition to various contributions anyway. Al-Qabbab replied

⁶² Translation of the Pact of Umar in Mark R. Cohen, ‘What was the pact of ‘Umar? A literary-historical study’, *JSAI* (1999) 107.

⁶³ Jacob Marcus, *The Jew in the Medieval World: A Sourcebook, 315-1791* (New York, 1938), 13-15 gives a translation as ‘lighted candles’, however, the Arabic texts of Turtushi, al-Wansharisi, and the Shurut al-nasara by Qadi Ibn Zabr give ‘niyran’: Abū Bakr al-Turtūshī, *Sirāğ al-mulūk*, M. Faṭḥī Abū Bakr, ed. (Cairo, 2006), 542-543; Aḥmad ibn Yaḥyá Wansharīsī, and Muḥammad Ḥajjī, *'al-Mi'yār 'al-mu'rib Wa-'al-jāmi' 'al-mughrib 'an Fatāwá 'ulamā' Ifrīqīyah Wa-'al-Andalus Wa-'al-Maghrib* (Beirut, 1981), 237-238; Cohen, ‘What was the Pact of ‘Umar?’, 132-157. With thanks to Mark R. Cohen for confirming this.

⁶⁴ Lagardère, *Histoire et société*, 194. Similar prohibitions were common for Christians as well. For example, royal ordinances in Portugal 1513-14 and revised in 1521 prohibited while at war with Muslims trading ‘bread, wine, olive oil, salt, wax, honey, food or any other goods’ with them: Giuseppe Marcocci, ‘Trading with the Muslim World: Religious Limits and Proscriptions in the Portuguese Empire (ca. 1480–1570)’, in Francesca Trivellato, Leor Halevi and Cátia Antunes (eds.), *Religion and Trade: Cross-Cultural Exchanges in World History, 1000–1900* (Oxford, 2014), 99. Licenses to sell prohibited goods (coses vedades) were also recorded in Valencia: e.g. Guiral, ‘L’apport des communautés juives et musulmanes’, p.463, Guiral, ‘Les relations commerciales du Royaume de Valence’, 99-131. For earlier papal interdictions see Yom-Tov Assis, ‘Els jueus de Barcelona i el comerç marítim amb la Mediterrànea oriental’, *Tamid* 2 (1998-99), 33

with regard to whether this was an innovation (*bi'da*) and responded that these believers should be praised.⁶⁵ The development of the mawlid in opposition to Christian influence in Muslim society—particularly the celebration of Christian holidays such as Christmas and the Feast of St John the Baptist—was encouraged by al-Azafi in Ceuta, and further promoted by his son Abu l'Qasim across the Maghreb.⁶⁶ The Muslims of al-Andalus, in particular, were seen to celebrate Christian festivals rather too enthusiastically, suggestive of close mercantile and social contact between the two religious communities. A joyful festival of obviously Muslim character seemed more appropriate, hence the promotion of the mawlid.⁶⁷

Popular celebration of the mawlid involved recitation of the Qur'an and panegyric verses, music, banquets, gift giving and, oft-remarked upon, lighting candles.⁶⁸ Writing in the fifteenth century, al-Nasharbi noted that fathers should give candles to their children's teachers on the mawlid. But he made particular reference to this being a custom of the middle and western Maghreb, and it seems that it was here that medieval writers found the mawlid to have been especially popular.⁶⁹ These were regions of intense international trade, the far western part connecting the Saharan caravan routes with European merchants, and they were well-positioned to experience the increasing economic and political power of the expanding Christian kingdoms to the north.⁷⁰ It seems possible, then, that the particular

⁶⁵ Lagardère, *Histoire et société*, 47; also discussed in N.J.G. Kaptein, *Muhammad's Birthday Festival: Early History in the Central Muslim Lands and Development in the Muslim West until the 10th/16th Century* (Leiden, 1993) 113. Whether celebration of the mawlid was an innovation which should be rejected was a subject of debate amongst legal scholars.

⁶⁶ See for example Marion Holmes Katz, *The Birth of the Prophet Muhammad: Devotional Piety in Sunni Islam* (London, 2006), 10; Kaptein, *Muhammad's Birthday Festival*, 76. Al-Azafi (d.1236): 'I think that only the proximity with the Christians—may God destroy such neighbours—contact with their merchants and the intensive social intercourse with them during the period of their captivity have encouraged the inhabitants of al-Andalus to act this way': Kaptein, *Muhammad's Birthday Festival*, 82. See also Fernando de la Granja, 'Fiestas cristianas en Al-Andalus (Materiales para su estudio)', *Al-Andalus* 34 (1969), 252. The first Fatimid celebration is given as 517 AH, first Sunni celebration 546 AH: Katz, *Birth of the Prophet Muhammad*, 5. The mawlid was celebrated in Tlemcen in fourteenth century, and in Tunis in fifteenth: Bárbara Boloix Gallardo, 'Las primeras celebraciones del "Mawlid" en al-Andalus y Ceuta, según la "Tuhfat al-mugtarib" de al-Qastali y el "Maqsad al-sarif" de al-Badisi', *Anaquel de estudios árabes* 22 (2011), 85.

⁶⁷ See for example de la Granja, 'Fiestas Cristianas en al-Andalus'; Denis Gril, 'La commémoration de la naissance du Prophète (*mawlid al-nabî*)', in Gilles Dorival and Jean-Paul Boyer, eds., *La Nativité et le Temps de Noël : Antiquité et Moyen Âge* (Aix-en-Provence, 2003), 189-202.

⁶⁸ For example Abu Abd Allah Muhammad b. Ibrahim b. Abbad (sixteenth-century Fes): 'What about the Nativity of the Prophet who is celebrated by lighting candles?' 'This is a holiday about which it is wrong to discuss innovation': Lagardère, *Histoire et société*, 475. Abu 'Inan remarked on the importance of perfume and candles: *Ibid.*, 11; Ibn 'Abbad al-Rundi included lighting candles as an expression of joy: Kaptein, *Muhammad's Birthday Festival*, 114; Katz, *Birth of the Prophet Muhammad*, 105. Candles were also used as a splendid source of light: Leo Africanus wrote that the main mosque in Fes was lit by candelabras which held 1,500 candles (the candlesticks were said to be made from the bells from churches taken by the King of Fes): Leo Africanus, *The History and Description of Africa*, 422.

⁶⁹ Kaptein, *Muhammad's Birthday Festival*, 125; al-Burzuli (fifteenth-century Tunis) in al-Wanshirisi: Lagardère, *Histoire et société*, 325; the mawlid was popular in Granada from the middle of the fourteenth century: Cynthia Robinson and Amalia Zomeño, 'On Muhammad V, Ibn al-Khatib and Sufism', in Amira Bennison, ed., *The Articulation of Power in Medieval Iberia and the Maghrib* (Oxford, 2014), 159.

⁷⁰ James A.O.C. Brown, 'Azafid Ceuta, Mawlid al-Nabi and the Development of Marinid Strategies of Legitimation', in Amira Bennison, ed., *The Articulation of Power in Medieval Iberia and the Maghrib* (Oxford, 2014), 145, 147.

forms of popular devotion which developed to celebrate the mawlid found their expression inflected by Christian popular practice, of which the most dazzling in a Christian context was extensive use of candles.⁷¹ Leo Africanus described how in Fes children would bring candles, sometimes decorated with wax fruit, which were burnt from dawn to sunrise, after which the decoration were handed out as gifts and the unburnt candle ends were sold to raise money.⁷² Lights—either candles or oil lamps—could be made more spectacular by reflecting the flames through glass holders, the visual spectacle combining with the smell of perfume.⁷³

Honey was also an important food served at the banquets held for the mawlid.⁷⁴ In the thirteenth century, Abu Marwan al-Yuhanisi of Almería, who was also brought gifts of candles to use for the celebration of the mawlid, made sweet cakes of honey for the poor and was said to have given a banquet at which vast amounts of honey and oil were consumed by the guests.⁷⁵ Its popular consumption is demonstrated by a case brought before al-Abdusi in late medieval Fes in which two merchants agreed on the mawlid to sell honey at a cheaper rate than usual, but one reneged on the promise and continued to sell honey at the higher price.⁷⁶

Beeswax, therefore, played a role in religious celebrations in both Islam and Christianity, and while the context and symbolism were very different, the desire for spectacle through impressive displays of light was a common thread. It is unsurprising that the central and western Maghreb, a region of vast wax production, developed popular customs which involved the use of wax candles—particularly given the close economic ties with the Christian kingdoms to the north. Thorough study of the use of candles in the Christian societies of the Mediterranean, and the consequent demand for wax could shed important light on the extent to which Christian displays of light may have impacted or encouraged the use of candles in this region of the Maghreb for celebrating the mawlid. There is no doubt, however, that the Muslim need for wax was insignificant compared with that of Christians. By the same token, there is also every indication that their honey consumption was significantly greater. The sheer quantity of honey produced in this region is reflected in the amount of wax exported. Yet whereas wax was a major export commodity, honey

⁷¹ This is not to say candles were used only in the Maghreb: in late fifteenth-century Damascus, Ibn Tawq took 'a large gilded candle' to celebrate the mawlid with his neighbor: Katz, *The Birth of the Prophet Muhammad*, 72.

⁷² These could weigh up to 30 lbs: Kaptein, *Muhammad's Birthday Festival*, 127; Leo Africanus, *The History and Description of Africa*, vol. 2 book 3, p.456.

⁷³ Boloix Gallardo, 'Las primeras celebraciones del "Mawlid"', 92, 93; Kaptein notes that the mawlid under the Marinids was celebrated with an 'enormous quantity of candles and perfume': Kaptein, *Muhammad's Birthday Festival*, 105, see also 115. Of course candles were not only used for the mawlid: the Dome of the rock and Aqsa Mosque for example were noted as having thousands of lamps and candles (Eva Baer, *Metalwork in Medieval Islamic Art* (New York, 1983), 7).

⁷⁴ For example, Kaptein, *Muhammad's Birthday Festival*, 122.

⁷⁵ Boloix Gallardo, 'Las primeras celebraciones del "Mawlid"', 89, 92. So much so that the next day a poor man came to his house and asked for a spoonful of the leftover honey. Honey consumption for the mawlid was also noted by Ibn al-Sakkak (d. 1415); glass lamps were also used at this banquet: Kaptein, *Muhammad's Birthday Festival*, 95.

⁷⁶ Lagardère, *Histoire et société*, 96; also discussed in Kaptein, *Muhammad's Birthday Festival*, 124.

was not.⁷⁷ The ubiquity of wax leaving the Maghreb, suggests huge quantities of honey were being produced, reflecting the social, cultural and religious importance of honey in medieval Muslim societies.

The reliance of Christian religious practice in parts of Europe on a by-product of Islamic culture, and the brisk sale of this commodity from the Muslim Maghreb, which knowingly facilitated Christian practice, presents a layer of complexity in Christian-Muslim relations, as does the role of Jewish merchants in this trade. Although we do not yet know the precise means by which wax travelled from the Muslim beekeeper to ships bound across the sea, we may speculate that the presence of middlemen could have eased the consciences of some more hesitant Muslim traders. In this, converso and Jewish merchants may have had a particular role to play, and this may account, at least in part, for the prominence of wax in the *dret del vintè*. Yet, as noted above, wax was to be found in almost every ship's hold leaving the Maghreb, and the majority of this was carried by Christian merchants directly to Christian outposts. The actual trade in an expensive, profitable and locally superfluous commodity associated with Christian religious use did not always pose the moral quandary its theoretical trade might have.⁷⁸ . At the same time, however, the situation within the Crown of Aragon likely meant that the Jewish presence within this trade between the Maghreb and Iberia was particularly prominent. Certainly the mechanism by which the king chose to encourage commercial activity after 1391, the reduction of the tax on goods brought by Jewish merchants from North Africa, demonstrates their importance in this trade.

In discussing trade between members of different religions, Leor Halevi has drawn attention to the need to distinguish between instances in which religion or cultural practice played a significant role in the exchange, and those in which they did not.⁷⁹ It is clear from the trade in beeswax that such categories were fluid, for the wax trade provides an example of both. Driven by Christian demand for wax and Muslim demand for honey, it was completely intertwined with religious practice. But demand existed in part because of supply, and supply existed in part because of a confluence of environmental and economic factors quite apart from religious practice, such as types of land use, management of pastoral resources, vegetation and temperatures. These were mutually reinforcing and dependent: high demand for wax made for a lucrative trade, which may have encouraged the expansion of beekeeping. That beekeeping, however, was already present on what was likely a vast scale because of cultural, religious, and economic circumstances internal to the Maghreb.

This study has highlighted not only the potential economic scale of the trade in Maghrebi wax, which has yet to be fully understood, but has also pointed to the cultural importance

⁷⁷ The divergence of these trades and its cultural, culinary and environmental ramifications is currently under study as part of the project 'Bees in the medieval world'.

⁷⁸ On economic versus moral concerns regarding a different commodity, see Leor Halevi, 'Christian impurity versus economic necessity: A fifteenth-century fatwa on European paper', *Speculum* 83 (2008), 917-945, esp. 920.

⁷⁹ Leor Halevi, 'Religion and cross-cultural trade: A framework for interdisciplinary inquiry', in Francesca Trivellato, Leor Halevi and Cátia Antunes (eds.), *Religion and Trade: Cross-Cultural Exchanges in World History, 1000–1900* (Oxford, 2014), 60; Halevi discusses books and wax candles.

of honey in Islam that underpinned it. In so doing, it has also emphasized the environmental context on which this Mediterranean trade was predicated. Wool, hides and wax were related commodities—flocks, herds and their human attendants clearing the land in ways which provided excellent bee forage. But just because land may be useful for a particular purpose does not mean that it will necessarily be utilized as such. The impetus for large-scale beekeeping came from the role honey played in the religious, cultural and social life of medieval Muslims. The extent to which beekeeping was practiced to meet this local demand for honey or was intensified by foreign demand for wax requires further investigation and can only be understood once the full extent of the demand for, consumption of, and trade in wax has been examined across the whole of Europe. Christian demand for wax provided a ready outlet for a product for which local Muslim communities found little use. The economic importance of wax to these Christian communities may indeed have further encouraged the expansion and intensification of apiculture which was already extensive in the Maghreb.

The role of conversos and Jewish merchants in the wax trade may be related to the moral quandary posed by trade in a commodity so obviously meant for liturgical purposes. But it also indicates how embedded these traders were in the commercial networks of the Maghreb, well positioned geographically, culturally, linguistically and economically to work between the Christian and Muslim worlds, participating in the trade of a commodity which was fundamental to Christian religious devotion and a by-product of Islam. But wax was an acculturating product and a product of acculturation. That sales of wax evoked concern demonstrates how prominent wax candles were in Christian devotion. The use of wax candles in celebrations of the mawlid, a Muslim festival promoted to re-direct enthusiasm for Christian festivals, in the areas with the greatest contact with Christian merchants from the economically and politically powerful kingdoms to the north, is suggestive of such adoptive influences albeit for very different symbolic purposes.

Medieval cultures imbued bees, honey and wax with symbolic power, and their presence resonated in culturally specific ways across the Mediterranean and beyond. These religious beliefs and cultural preferences linked small-scale producers with merchants of long-distance trade; petty honey sellers in Morocco with cathedrals in the Crown of Aragon; the Muslim jurist, the unwilling convert, and the faithful Christian. Muslims, Jews, conversos and Christians encountered each other in networks of exchange which carried the waste product of one to the altars of another. In this we see how the three Abrahamic religions were brought together by the bee in the medieval world.