SÖYLEŞİ **INTERVIEW**

Charles Burnett

An Interview on His Intellectual Biography and the Study of Arabic–Latin Transmission

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This interview inaugurates a new series devoted to scholars whose work examines the presence, influence, and perception of Islamic philosophy and science in Europe. The aim is to introduce leading researchers in the field, to illuminate their intellectual formation and methodological approaches, and to offer readers a clearer understanding of how Islamic thought and culture contributed to the development of medieval and early modern European scholarship.

The first interview in this series features Professor Charles Burnett, one of the foremost historians of Arabic–Latin intellectual transmission. The conversation is structured in two parts. The first traces his intellectual biography, exploring the cultural, academic, and personal influences that directed him toward the study of Arabic sources and their reception in the Latin West. This section provides insight into the research pathways, motivations, and methodological principles that have shaped his scholarly trajectory. The second part turns to Burnett's major contributions to the field, discussing central themes in his work—from translation movements to scientific exchange—and highlighting what his findings reveal about the impact of Islamic science and philosophy on medieval Europe.

Trained in Classics at the University of Cambridge (BA 1972; PhD 1976), Burnett held research posts at St John's College and the Warburg Institute before being appointed Lecturer in the History of Arabic/Islamic Influences in Europe at the Warburg in 1985. He became Professor in 1999 and was elected Fellow of the British Academy in 1995, and has held visiting positions at Princeton, Berkeley, and Munich. His scholarship centres on the translation of Arabic scientific and philosophical texts into Latin between the tenth and thirteenth centuries. His volume *Arabic into Latin in the Middle Ages* remains foundational in the field. Beyond translation history, his research traces the broader influence of Islamic civilization on Europe, including contributions to philosophy, astronomy, medicine, music theory, astrology, and the occult sciences.

The interview was conducted in person in Professor Burnett's office at the Warburg Institute, London, on 1 July 2024, shortly before his retirement. The transcript has been lightly edited for clarity and coherence while preserving the substance of the original dialogue. The footnotes offer both contextual explanations intended to facilitate the reader's understanding and references to works by Professor Burnett and other scholars whose research informs, engages with, or further develops the topics discussed in the interview. I would like to express my sincere gratitude to Research Assistant Enes Güllü for pro-

posing the idea of publishing this interview in the *BİTAD* and for persuading me to pursue it. I am also indebted to Research Assistant Yavuzcan Gökçer for transcribing the audio recording and for translating the English text into Turkish with great care and precision.

Early Scholarship and the Turn to Arabic Sources

> Thank you, Professor Burnett. I'm delighted to have the opportunity to learn from your extensive research and insights. To begin, could you please give us a brief overview of your academic journey, particularly the initial motivation for your early research?

Well, I was brought up partly in East Africa, and then I came to England when I was eight. I went to a very fine secondary school called the Manchester Grammar School. And from there – well, there I studied Latin and Greek in the sixth form and won a scholarship to Cambridge University, St John's College. I pursued Latin and Greek – the whole of classical culture, really. You learn about an entire culture when you're doing the classics courses.

In my last year, we had options. We could do either law or literature or poetry or architecture, etc. One option was Medieval Latin. There was a very fine professor of Medieval Latin called Peter Dronke, who really inspired me. We read a lot of medieval Latin literature, both prose and poetry. One work we read was a long cosmography, you would call it, by Bernard Sylvester, which tells us about the world and the human being – the place of man within the world.[1] Peter Dronke told us that Bernard Sylvester was influenced by Arabic sources that were being translated at the time. He was associated with the School of Chartres, and people educated at this school were interested in investigating Arabic sources.[2]

So when I graduated, I said I wanted to do research in Medieval Latin. I went straight to Peter Dronke and said I was particularly interested in finding out

[1] Bernardus Silvestris (fl. mid–12th century) was a Latin poet and philosopher associated with the School of Chartres. His major work, commonly referred to as a "long cosmography," is *De mundi universitate* (also known as *Cosmographia*), a prosimetrum that presents a philosophical and allegorical account of the creation of the universe and the place of the human being within it. For an authoritative edition, see: Bernardus Silvestris, *De mundi universitate*, ed. Peter Dronke (Oxford: Oxford University Press, 1978).

[2] The School of Chartres denotes the influential twelfth–century intellectual circle associated with the cathedral school of Chartres. Renowned for its engagement with classical learning – especially Plato, Boethius, and the *Timaeus* tradition – it developed a distinctive synthesis of natural philosophy and cosmology. Although primarily rooted in classical sources, this milieu also shows early awareness of Arabic scientific works, which were increasingly becoming available through translation in the same period; several scholars connected to Chartres drew selectively on ideas mediated through emerging Latin translations of Arabic authorities.

the Arabic sources that influenced European literature and European society. He gave me a book by Charles Homer Haskins, *Studies in the History of Medieval Science*. Each chapter was devoted to a translator – or a group of translators – mainly translators from Arabic, rather than translators from Greek, concentrating mostly on the twelfth century. He said: *"Choose somebody among the people mentioned by Haskins."*

There was an entire chapter on someone called of Carinthia.[3] This intrigued me because he was not only a translator, but he also wrote an original work on the essences, *De Essentiis*, which turned out to be based on his extensive knowledge of Latin literature and his new knowledge of Arabic literature, much of which he had translated himself. So I said I would like to study this work. We discovered that nobody had made a critical edition or study of it. It was written in 1143 in Béziers. So I made a critical edition.

For the edition, it was necessary for me to learn Arabic and to look at Herman's translations from Arabic in order to understand the sources. My extensive commentary therefore discussed and identified the sources of this work, both Latin and Arabic. Once I started on that, of course, there was no stopping, because there was so much literature – so many translations made from Arabic into Latin.

Herman himself collaborated with someone called Robert of Ketton.[4] Robert and Herman were commissioned in the 1140s to put together a set of translations of Islamic material. Robert, in fact, translated the *Qur'an*. So I became involved in looking at these translations and the Western understanding of Islam through them.[5] They were particularly interested in translations of works

[3] Herman of Carinthia (fl. 1138–1143) was a translator and intellectual of the twelfth–century translation movement in the Iberian Peninsula. His major original work, *De Essentiis*, is a philosophical treatise that synthesizes Latin Platonism, elements of Aristotelian natural philosophy, and materials derived from newly translated Arabic sources – many of which Herman himself helped render into Latin. The treatise is also a key example of early Latin engagement with Arabic science, including cosmology, psychology, and meteorology. The critical edition remains: Charles Burnett, *Hermann of Carinthia: De essentiis* (Leiden: Brill, 1982).

[4] Robert of Ketton (fl. 1130s–1150s) was one of the influential translators of Arabic texts into Latin during the twelfth century. Originally from England and active in Toledo, he collaborated with Herman of Carinthia and other scholars involved in the early phases of the Toledo translation movement. He translated significant works on astronomy, astrology, and algebra, including texts attributed to al–Khwārizmī. For an overview, see: Marie–Thérèse d'Alverny, "Robert of Ketton," in *Dictionary of the Middle Ages* (New York: Scribner, 1988), 10/301.

[5] Robert's translation of the Qur'an, *Lex Mahumet pseudoprophete*, is the earliest known complete rendering of the Qur'anic text into Latin. Commissioned by Peter the Venerable, the translation formed part of a larger intellectual project to understand Islam through its primary sources. While the version is stylistically free and sometimes interpretative – reflecting polemical aims as well as Robert's attempt to make the text accessible to a Latin readership – it became a foundational source for medieval Christian knowledge of the Qur'an. A critical edition is available

on what one would call mathematics – from arithmetic through geometry to music – and especially astronomy.

To return to my career: fortunately, I was supported in my desire to study translations from Arabic into Latin by receiving a postdoc. First in Cambridge, where I did my PhD – I stayed in St John's College for ten years altogether. Then I spent time as a research fellow at the Warburg Institute. The Warburg Institute is really the foremost centre in the world for the study of what you might call the classical tradition – what happens to ancient works in every subject, and ancient works of art as much as ancient textual works, as they are transmitted via Latin into the Renaissance and vernacular languages, but also what happens when they're transmitted through Syriac, Arabic, and Hebrew and so on. And then these streams come together. The Warburg Institute was a natural place to make this kind of study, and they made me a fellow.

After that, I was in Princeton as a Member, and briefly in Sheffield as a researcher. Then I was very lucky, because Margaret Thatcher – of worldwide reputation – had the idea of reviving or developing research and teaching in Great Britain by promising that the government would support, for the first four or five years, a new lectureship in a department that had made no appointments for ten years, and in a subject not part of the normal curriculum, thus extending the range of subject matter within universities.

The Warburg Institute applied for one of these positions because it had not appointed anybody for ten years. They proposed that the position should be a lectureship in either Arabic or Hebrew transmission. Fortunately, I got this lectureship, which then became – well, I think the full title is *University Lecturer in the History of Arabic and Islamic Influences in Europe*. Once I was a lecturer, teaching in the Institute and so on, I was gradually promoted until the time came when I was appointed a Fellow of the British Academy. I think this was in 1995. And then it seemed odd that I should be just a lecturer and a Fellow of the British Academy, so I was made a professor as well.

So my career has been very straightforward, as it were, but I am in exactly the right place for doing this kind of research. And I've had opportunities to teach elsewhere for one term or six months – in Japan, Berkeley (California), Toronto, and Munich. So I have benefited from being in other places too. Because research and teaching – university academic life in general – at the highest level is some-

in: James Kritzeck, *Peter the Venerable and Islam* (Princeton: Princeton University Press, 1964), which includes the Latin text and commentary.

thing global. You are always collaborating, working with people from other universities and countries. And if you're doing a subject like the influence of Islam, then of course all Islamic countries are involved as well, and indeed Israel too.

Translators, Texts, and Medieval Knowledge Networks

> In 1994, your essay on Scotus, and in the following years, your studies on the Islamic transmission to the West in different places and different periods—such as the Toledo school, Adelard, Frederick II. Then, in 2009, you published them together in *Arabic into Latin in the Middle Ages*. I wonder if you followed a particular method, since you have studied different phases of transmission from the early period to the Renaissance. Did you have a roadmap in this whole research process?

Not really, no. I was just aware of the vast amount of material to study, and because at first I was interested in Herman, then I became interested in what his group of translators was doing. There was someone called *Hugh of Santalla*, who was working in Tarazona and translating many works attributed to Hermes Trismegistus.[6] There was Robert, whom I have already mentioned. There was Plato of Tivoli, who was working in Barcelona – again, not too far away in northeastern Spain or southern France.[7] Then, of course, there was the whole group of translators working in Toledo.

And then you can follow – well, I must admit I had some patriotism here, because I liked to follow the English translators. Robert was English; Alfred of Shareshill, probably working in Toledo, was obviously English; and finally Michael Scot in the early thirteenth century – they all came from the British Isles anyway, so I wanted to promote these works by Adelard, especially, I wanted to promote these scholars.

If I have a method, it has generally been to identify important texts that were

[6] Hugh of Santalla was a key figure in the early phase of the translation movement in the Ebro Valley, particularly in the region of Tarazona. Working before the major Toledo translation enterprise fully developed, Hugh produced Latin versions of a wide range of texts attributed to Hermes Trismegistus, as well as works on astrology, astronomy, divination, and natural philosophy. His translations – often based on Arabic intermediaries – introduced European scholars to elements of the Hermetic tradition, occult sciences, and technical disciplines that were otherwise unavailable in Latin. See: Charles Burnett, "Hugh of Santalla," *Medieval Science, Technology, and Medicine: An Encyclopedia*, ed. Thomas F. Glick et al. (New York: Routledge, 2005), 231–232.

[7] Plato of Tivoli (fl. c. 1116–1138) was one of the productive translators of Arabic scientific and mathematical texts into Latin in the early twelfth century. Active mainly in Catalonia, he translated foundational works in astronomy, astrology, mathematics, and geodesy, including al-Battānī's De motu stellarum, and several treatises by al-Khwārizmī or attributed to him. See: Charles Burnett, 'Plato of Tivoli,' in *Dictionary of the Middle Ages*, ed. Joseph R. Strayer (New York: Charles Scribner's Sons, 1987), 9/704–705.

transmitted from Arabic into Latin and to provide editions for these texts. Because this is really the starting point of any research: you have got to know what was translated. The best way of seeing how something was translated is to do a critical edition of the original and of the translation. As soon as you start looking at many manuscripts – the transmission of the manuscripts of a text – you are looking at how it spread from one place to another, which scholars were involved in reading it, commenting on it, making glosses on it, and just how it was received.

Well, in particular, as I keep saying, I suppose it is no coincidence that the high point of the translating enterprise occurred in the middle of the twelfth century, just when European universities were starting up – Oxford and Cambridge, Bologna, Paris, Salamanca. These translations were immediately included in the university curricula, even though the translators themselves were not actually in Paris or Oxford or Bologna; they were in centres close to Arabic culture, like Toledo, Sicily, and the Crusader states. So the method – if one may call it that – is that I always start with texts and draw conclusions from the contents of the texts.

Magic, Astrology, and Scientific Method

> In 1996, your work on magic… not only text analyses, but also exploration of techniques, magic techniques. Then your work in 2004, the introduction to astrology—the famous Alcabitius. Where does your interest in magic and astrology come from, and can you tell us about your adventure?

My own interest? Well, obviously it's a translator's interest – I'm interested in the translators and their patrons. Because the question is always: who was encouraging these translations? Who were these translations for?

One could say that the earliest translations – now we go back to tenth–century Catalonia – had immediate practical use. And the most obvious practical use was astrology. So these tenth–century translations were of works on astrology and on how to use the astrolabe, again a very practical thing. In astrology you need to be able to measure where the stars are in the sky, and you need tables to determine a date, because a star or a planet is in a certain position.[8]

[8] The astrolabe, a scientific instrument originating in late antiquity, was significantly refined by Muslim astronomers such as al–Farghānī and al–Zarqālī. It was used to determine the altitude of celestial bodies, compute the time of day or night, establish prayer times and the direction of the qibla, and assist in astrological judgments and astronomical teaching. Latin Europe encountered the instrument largely through Arabic sources: early Latin treatises – such as those by Hermann of Reichenau, Adelard of Bath, and later John of Seville – were directly indebted to Arabic manu-

But astrology also includes another aspect of practical science: magic. If you had a good astrologer in your court, they could help you determine whether to go into battle or not, or decide which wife to impregnate – at what time to have intercourse. Very practical uses. And magic too had a similar role: if you wanted to find hidden treasure, or if a slave had run away and you wanted to find out where he was, there were magical techniques – what we call magic. "Magic" is a very catch–all term, but let's say arts of prediction: ways of predicting what is likely to happen in the future, and of discovering what is hidden in the present.

You could use astrology; you could use something called geomancy, where you cast dots – lines of dots – on sand, pair them up, and see whether an odd or even number of dots remain and so on. You could use talismans. A talisman is a very practical instrument because you actually make something: you take a stone or a metal, or you can bake something, and then inscribe it. You cast the talisman, or make it, at an astrologically appropriate time, and you also put it into action at an appropriate astrological time.[9]

So it's a mixture of astrology and – one might say – the magical aspect of astrology, sometimes called astro–magic, where you use the influence of the stars to empower an object. The talisman then has a specific purpose: making someone fall in love with you (or your client), destroying a city, making someone a king, or making a ruler favourable to you, that sort of thing.

Did they perceive magic as a science, or did they teach it in monasteries?

Did they use it? Yes. One can, I suppose, make a rough distinction between sciences in which you have to learn – where the knowledge is very much structured and complex. You have to learn your astronomy and your astrology; you can't just pick them up. So you can distinguish sciences – even if we might say such a science has no rational justification – because they follow very precise

als and technical terminology. The widespread adoption of the astrolabe in cathedral schools and, later, in universities reflects its central role in the transmission of mathematical astronomy from the Islamic world to the West. For a comprehensive study, see: David A. King, *In Synchrony with the Heavens: Studies in Astronomical Timekeeping and Instrumentation in Medieval Islamic Civilization*, 2 vols. (Leiden/Boston: Brill, 2004–2005).

[9] A talisman (Arabic: *ṭilsam*, from Greek *telesma*) is a crafted object – often made of metal, stone, or baked material – inscribed with specific symbols, names, planetary signs, or invocations, and created at astrologically significant moments in order to harness the supposed influences of celestial bodies. In medieval scientific and occult literature, talismans were part of astral magic (*al–siḥr al–najmī*), a discipline combining astronomy, astrology, and ritual practice. Arabic texts (like *Ghāyat al–ḥakīm*, Latin: Picatrix) circulated widely in medieval Europe through Latin translations, influencing scholars interested in astral magic. Talismans were believed to achieve various aims, from healing and protection to inducing love, locating hidden objects, or conferring political advantage. See: David Pingree (ed.), *Picatrix: The Latin Version of the Ghāyat al–Ḥakīm* (London: Warburg Institute, 1986).

rules and have to be learned, starting with basic principles and moving into more and more complex aspects.

But you can distinguish that from popular remedies or popular techniques for finding things, or for casting spells on your neighbours and so on, which is more like folklore or folk magic. And you see instances, in a monastery for example, of people using very crude techniques to find some lost ring or whatever.

The basic – sorry, going too fast maybe – but the basic distinction that makes something magical rather than scientific is the use of what in the Middle Ages were called *spiritus*; what in Arabic we call the ruhaniyyat or the *jinn*; what in Greek we call the *daimones*. These were spirits often associated with the planets, believed to exist in some kind of incorporeal or semi–corporeal form everywhere in the universe.

Within magic you can actually use the power of these spirits, or you can make friends with them so that they obey you. And it is through these spiritual forces that you can act on things. You bring these spirits into the talisman; you have special rituals for calling upon them – because they all have names – and you burn things as a kind of sacrifice to them.

Now, this is a very suspicious or dubious kind of activity, because if you're worshipping spirits, you're not directing your worship entirely to God or to the Christian saints. And similarly in the Islamic world, or even in the Jewish world, the spirits are rivals, as it were, to the true God. You can pray to the true God, but if you start praying to spirits, this is regarded as very suspicious and not to be allowed.

Now, straightforward astrology – well, even within astrology, you can work things out entirely mathematically and say, "If Jupiter is in the sign of Aries, this means such–and–such," because that is what the books say. That is the experience of many generations of astrologers. You can work things out just by using the positions of the planets now and the positions they will have in the future. And that can be regarded as completely innocuous, especially if you believe that the stars and planets are simply servants of God – God's way of transmitting knowledge to human beings who are able to understand how to interpret them. They are a form of God's providence and are regarded as signs rather than causes.[10]

[10] The medieval distinction between celestial bodies acting as signs (signa) rather than causes (causae) was central to reconciling astrology with monotheistic theology. According to this view – articulated by thinkers such as Augustine, later refined by Thomas Aquinas, and echoed in both

But as soon as you cross the border, as it were, and make the stars *causes*, that becomes a bit dubious, because only God can really cause things to happen. Secondary causes might be acceptable. But when you give the stars agency – if they are causes – then it might be said that they "wish" something to come into being. Again you are moving towards the idea of spiritual forces. Often there is said to be a whole set of spiritual forces associated with the planets – forces of left, right, up, down, inside, outside, and so on. And as soon as you start regarding these as the causes of things, rather than God acting through His intermediaries, you are in dangerous territory.

Music and Mathematics in Cross–Cultural Exchange

> From magic to music. I know you have a passion for musical instruments. I would love to know how proficient you are and what types of music you are involved in.

Well, I've just been playing viola duets with a colleague. No, I'm very, very fond of music, and I had very good training in Manchester – at the Manchester College of Music – as a Saturday morning student, what was called a junior… well, I forget the exact term. Anyway, I play the piano, the viola, the viola da gamba, the Japanese shakuhachi, and the recorder.

I do a lot of music, and that can be brought into my academic interests. I've written about the influence of Arabic music on the West, especially musical texts. Only a few texts on the theory of music were known, but we do have some instances of these being known in the West through translations.

There is, of course, the obvious influence of Arabic musical instruments – the lute. You have one in front of you there. The Arabic *ʿūd* became the lute in the West; it is a direct descendant of the *ʿūd*. You have the *rebec*, which became part of the violin family. So there is no doubt about this kind of impingement.[11]

Christian and Islamic intellectual traditions – the stars may indicate or signify future events, but they do not produce them through independent causal power. Only God is the true cause, while celestial configurations function as indicators of natural dispositions or tendencies. This framework allowed scholars to defend certain forms of judicial astrology as compatible with divine providence, while rejecting deterministic interpretations that implied astral agency or compromised human free will. See: Thomas Aquinas, *Summa theologiae*, I, q. 115, a. 3.

[11] There are numerous examples attesting to the influence of Arabic music on medieval Western music theory and practice, particularly in zones of sustained intercultural contact such as al–Andalus, Sicily, and the courts of the Mediterranean. As Arabic sources entered circulation in the Latin world, various channels of transmission emerged at both the theoretical and practical levels; this contact also helped lay the groundwork for the formation of certain conceptual and technical frameworks concerning musical knowledge in medieval Europe. See: Charles Burnett,

It's very interesting to think about this, because people would have been surrounded – whether in areas in which there were Muslims or Arabs living – by sounds: the singing, the chanting of the Qur'an by the muezzin, the playing of the *ʿūd*, the singing of songs. And you can see this being echoed by Christians – the Christian troubadours. They would pick up the same melodies, sometimes the same words. It was like pop music these days: music spreads, musical instruments spread.[12]

So I've been interested in that. And then, of course, at a higher level, there's the idea of music being a mathematical science – the science of harmony and proportion – and this idea of harmony and proportion applying to the whole universe, a Pythagorean idea. You could say this is Pythagoreanism or Neopythagoreanism: the idea that you can explain everything in terms of proportions, of musical proportions, like fifths, fourths, thirds, octaves. And this is really a very powerful idea.

> As we talk about music, I'm reminded of how scientific endeavours can sometimes lead to sacrifices. For instance, during my PhD and after my PhD, I have struggled to find time to read novels or anything else. Have you ever experienced something similar—like not having enough time for your musical interests because of academic commitments?

Well, I can say, quite honestly, I couldn't do without music, so I've never had to give it up. It has always been there. I've never been too busy, let's say, not to play. And it is nice to be able to integrate, as I mentioned just now, musical interests with academic interests.

I was teaching here – well, I've been teaching this year, of course – a module on Arabic and Islamic authorities and Islamic elements in the Renaissance. But for several years I was also teaching music theory: the theory and practice of music in the Middle Ages and Renaissance. It was a course here for the MA students at the Warburg. So I have brought music into my academic, my professional life, as it were.

"European Knowledge of Arabic Texts Referring to Music: Some New Material," *Early Music History* 12 (1993): 1–17.

12 Troubadour poetry is characterised by its intricate metrical forms, refined courtly love motifs (*fin'amor*), and the professionalisation of lyric composition. Scholars have long observed thematic, lexical, and occasionally melodic parallels between troubadour lyric and Andalusi–Arabic poetic and musical forms, particularly the *muwashshah* and *zajal*. For an overview, see: María Rosa Menocal, *The Arabic Role in Medieval Literary History: A Forgotten Heritage* (Philadelphia: University of Pennsylvania Press, 1987), 71–90 ("The Oldest Issue: Courtly Love"); 91–114 ("The Newest 'Discovery': The Muwashshahāt").

> And the topics and methods of scientific research have remained relatively constant over the past 50 years. But the sources have certainly diversified, especially with the advent of the Internet in the last two decades, offering incredible technical possibilities. However, the future remains unpredictable, and there may be challenges or threats ahead for the social sciences and humanities. Have you managed to adapt to that change technically in your own academic career?

I don't know – maybe not. Things have been happening very rapidly, especially in using digital resources. Certainly it has become so much easier to access primary texts, because so many manuscripts have been digitised and photographed – and with very good photographs.

There have been attempts to digitise or use AI for editing texts, which I haven't really kept up with. Some people find it very useful to use a computer programme to assess the importance of different readings in different manuscripts, or to lay them out in a sensible order. Then there is the whole business of metatexts – how you can lay one text on top of another. You can start with a vernacular text, and then look through, as it were, that vernacular text to the Latin original, and then through that into the Arabic or the Syriac. These are wonderful resources and wonderful tools to be able to use. But I'm afraid I've been a little bit old–fashioned, as it were – just continuing to use the tools that I learned a few decades ago.

Islam and Cultural Perception in Medieval Europe

> Professor Burnett, for a long time our view of the medieval world was characterised by the harsh exclusivism of the Enlightenment. Even some modern approaches overlooked the diversity of medieval Europe, assuming it was uniform and homogeneous. However, the varied perceptions of Islam indicate otherwise. On the one hand, there were missionary endeavours or military doctrines; on the other hand, there was keen interest in Arabic sources or relations with Arabic culture. With Arabic culture in mind, how do you propose we categorise this diversity of approaches to Islam in the Middle Ages? And what insights can we gain from understanding these differentiations?

Well, I would like to think that what I've been doing in my research is redressing – or putting the record straight, as it were – in regard to the importance of Islam in Europe in the Middle Ages and afterwards. You have a period – certainly in the twelfth century – where you get the idea from several sources that the Arabs are indeed superior in the sciences and philosophy. Even the beauty of their language is appreciated, and the beauty of the Qur'an, and that Europeans have a lot to learn from the Arabs.

We might now think: well, the Arabic world later declined and fell behind, and only survived or developed because of the importation of Western ideas, science, and technology. But it is completely the reverse. In the eleventh century, the great Arabic scholars like al–Biruni and Ibn al–Haytham were far ahead of any scholars in the West. They were both from the eleventh century. At that time there was hardly anybody in the West who was of the same quality, with the same wide range of experience, the same understanding of the importance of experiment, for example, as al–Biruni and Ibn al–Haytham.[13] And so, in the twelfth century, you see statements like one from John of Salisbury saying: "*If you want to know about geometry, ask the Arabs.*" You know, the Arabs are the foremost people in geometry.[14]

> That means there are different approaches, different relations with Islamic sources.

Well, at a very basic level it is a difference of readings, as it were. The Arabs had many more books – many not only translated from Greek (sometimes via Syriac), but also books they composed themselves. They wrote books. You have so many books on astronomy and philosophy.

Even a single author like Ibn Sina, from the early eleventh century, not only wrote an enormous book called the *Canon – al–Qanun fi al–Tibb* – which took in the whole of medicine and described it, but he also wrote *the Shifa*, which is a very large – well, not summary, but a development of his own working–out of every aspect of philosophy.[15] But these were just two books among some fifty

[13] Ibn al–Haytham (d. ca. 1040), known in the Latinized tradition as Alhazen, radically transformed prevailing conceptions of vision, light, and perception through his *Kitāb al–Manāzir* (Book of Optics); via the translations of Gerard of Cremona, it went on to profoundly shape later Latin optical traditions. In astronomy, Ibn al–Haytham's writings address topics such as the arrangement of the celestial spheres, planetary motions, and critiques of Ptolemaic models. A range of Latin astronomical treatises – including texts transmitted through Toledo and the Crusader states – drew on his analyses, especially his discussions of planetary models and observational techniques. For authoritative studies, see: A. I. Sabra, The Optics of Ibn al–Haytham, 2 vols. (London: Warburg Institute, 1989); and George Saliba, *Islamic Science and the Making of the European Renaissance* (Cambridge, MA: MIT Press, 2007).

[14] The remark often attributed to John of Salisbury (d. ca. 1180) – frequently paraphrased as "If you want to know anything about geometry, ask the Arabs" – reflects the widespread recognition in the twelfth century that Arabic mathematical and astronomical learning was highly advanced. Although this formulation does not occur verbatim in his writings, the underlying judgment aligns with passages in John's *Metalogicon* where – particularly in the context of the mathematical disciplines – he praises the analytical rigor and scholarly competence of Arabic–writing learned men. For context, see: John of Salisbury, *Metalogicon*, ed. C. C. J. Webb (Oxford: Clarendon Press, 1929), IV.6.

[15] Al–Qānūn fī al–tibb was translated into Latin by Gerard of Cremona and became one of the principal authorities in medical teaching in Western Europe; the work entered university instruction

or sixty books that he wrote. People wrote an enormous amount of material.

And Arabic libraries – well, Alexandria is a bit dubious – but certainly in Cordoba we have stories of 40,000 books being in the library. And this was at a period when a monastic library – the largest Western library – might have about 200 manuscripts. So at the level of literacy, one might say the importance of writing books, of reading books, of collecting books, of the importance of the word in general, is very prominent in Arabic society.

> That means there is more than Crusaders or inquisitions when we remember the medieval world. There is more than that. The narrative has shaped our understanding of medieval Europe, reflecting maybe modern struggles and defining European identity. Medieval Europe—people think "Crusaders." But no; there are different dimensions of relations.

What are the relations? Yes – what I would like to think, and what indeed is true, is that you do have conflicts. You do have Jews being attacked – pogroms – and Jews being exiled. You have Jerusalem itself, which was under the Arabs when the Crusaders arrived in 1099, totally destroyed. You have great destruction, you have great hostility. But you still have great admiration for scholarship.

And it was still possible, even among enemies, for people who were interested in Aristotle, as it were, to talk to each other across these ethnic and religious boundaries. And this is what we find especially in Spain, where you have a lot of skirmishes. The Christians were always trying to claim more territory within Spain. And then the Almoravids and then the Almohads were coming back and taking back land which the Christians had taken over.

But scholarship continued. People were still talking to each other across the boundaries between Arabic and Spanish – or some Romance language – and Latin. And one would like to think, and I think to a certain extent this is true, certainly among the Almohad kings in the mid– to late twelfth century, that scholarship was one way of reconciling different religions. Because no mat-

especially from the fourteenth century onward and continued to be used in teaching in some places until the eighteenth century. In philosophy, the Latin reception of Ibn Sīnā's *Shifāʾ* (especially its metaphysics and psychology) profoundly shaped scholastic discussions of essence and existence, the faculties of the soul, and the structure of causality. Modern scholarship has also produced reliable editions and translations of the key texts; among them is a parallel Arabic–English edition and translation of the metaphysics of the *Shifāʾ*. Ibn Sīnā's works thus constituted a major conduit through which Arabic Aristotelianism entered the Latin intellectual tradition. For an overview, see: Dag Nikolaus Hasse, *Avicenna's De anima in the Latin West* (London: Warburg Institute, 2000).

ter what your religion was, you could still abide by the same rules – whether they were philosophical rules or rules of medicine and mathematics and so on. What we call the secular sciences were the same irrespective of religion.

> And that curiosity about Arabic language and culture—and then the Council of Vienne in 1311, which required Arabic learning to enter universities such as Bologna, Paris, and Oxford. How did Arabic learning start in European universities at such an early date? Is it possible to identify its exact beginning?

It didn't really start, in spite of the Council of Vienne, with (I think) the Papal Curia insisting that at these five different universities there had to be a professor of Greek, Hebrew, Arabic, Syriac, I think, and something else. It didn't really have much effect, except to a small extent in Hebrew and Greek.[16]

And that was partly because the translations were so efficient. Once you had a Latin translation of an Arabic work, you didn't have to learn Arabic. And this was the general opinion. We might think that to really understand a work, you have to read it in its original language. But the great scholars of the West – Albertus Magnus, Thomas Aquinas – didn't think it was necessary to learn the original language. They trusted these translations.

There was an eccentric Englishman called Roger Bacon at the end of the thirteenth century who said: *in order to know theology, you have to learn Hebrew; in order to learn science, you have to learn Arabic*.[17] But he's really a rather solitary figure in both cases – he is an eccentric. The general opinion was that the

[16] The Council of Vienne (1311–1312), convened by Pope Clement V, decreed in its ordinance *De studio linguarum* that institutional teaching posts (chairs) for the instruction of "Eastern languages" be established both at the seat of the Roman Curia and at four major university centers (Paris, Oxford, Bologna, and Salamanca). The text of the ordinance specifically targets the teaching of Hebrew, Arabic, Greek, and "Chaldaean" (Syriac/Aramaic); in later summaries, this initiative is often referred to within the broader framework of an "Oriental languages" program. The purpose of these chairs was both missionary and scholarly: to equip clerics with the linguistic competence required for contact with, and preaching to, Jewish and Muslim communities, and to facilitate access to theological and scientific texts not yet translated into Latin (or circulating only in a limited manner within the Latin world). See Norman P. Tanner (ed.), *Decrees of the Ecumenical Councils*, 2 vols. (London–Washington, DC: Sheed & Ward; Georgetown University Press, 1990), 1:379–380; and Alastair Hamilton, "The Study of Tongues: The Semitic Languages and the Bible in the Renaissance," in *The New Cambridge History of the Bible*, ed. Euan Cameron (Cambridge: Cambridge University Press, 2016), 17–18.

[17] Roger Bacon regards the knowledge of foreign languages (especially for engaging with sacred texts and the philosophical literature) as indispensable to the advancement of learning in the Latin world; he also emphasizes that translators/interpreters may often be inadequate or unreliable. See Roger Bacon, *Opus maius*, ed. John Henry Bridges, 3 vols. (Oxford: Clarendon Press, 1897; London: Williams & Norgate, 1900), III/97–106.

translations had been made so faithfully. And indeed it became the policy in twelfth–century Toledo and elsewhere to translate very literally. And if you translated literally enough – and especially if you added glosses, explanations – then you could throw away the original text.[18]

So Arabic studies didn't really start until the sixteenth century in Europe, when people became genuinely interested in looking at Arabic texts in the original language, and also became interested in Arabic literature, poetry, and epic.

> Was there an organised and systematic approach to the transmission of knowledge, or did it vary based on specific needs or circumstances?

Well, that's a good point. There was an understanding in philosophy. People knew that Aristotle had written works not only on logic – which had in fact already been translated in the late classical period – but also on natural science, on metaphysics, and on ethics and politics. And so the Europeans, as it were, had a template that they needed to fill in.

This is particularly clear in the case of natural science, where there is a progression from one work of Aristotle to another, starting with the *Physics* and eventually ending up with the works on animals, or geological works. And we can see that there was a deliberate attempt to translate all these works in succession, until Michael Scot finished translating the work on animals.[19]

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[18] In twelfth–century Iberia, especially within the Arabic–Latin translation milieu around Toledo, the Latin rendering of technical texts often followed the conceptual organization of Arabic phrasing closely, at times opting for relatively "literal" or word–oriented solutions; yet within the same translational practice one also finds selective adaptation and explanatory additions intended to clarify the sense or make the text workable in Latin. This framework should be understood in connection with the Toledo–centered translation movement and the translators commonly associated with it (e.g., Gerard of Cremona, Dominicus Gundissalinus), and with the goal of producing a Latin text suitable for teaching and commentary. See Charles Burnett, "The Translating Activity in Medieval Spain," in *The Legacy of Muslim Spain*, ed. Salma Khadra Jayyusi (Leiden: E.J. Brill, 1992), 1036–1058; Charles Burnett, "Literal Translation and Intelligent Adaptation amongst the Arabic–Latin Translators of the First Half of the Twelfth Century," in *La diffusione delle scienze islamiche nel Medio Evo Europeo*, ed. Biancamaria Scarcia Amoretti (Rome: Accademia Nazionale dei Lincei, 1987), 9–28, esp. 14–18.

[19] The Scottish scholar, astrologer, and translator Michael Scot (d. in or after 1235) was active at the court of Frederick II in Sicily and later in northern Italy. He was among the key figures who helped bring into Latin circulation important Arabic learning, including Latin versions of major Averroean commentaries on Aristotle, and he also worked on astronomical materials. Michael Scot's translations and associated activities contributed significantly to the consolidation of scholastic Aristotelianism and to the Latin reception of Averroes. See Piero Morpurgo, "Scot [Scott], Michael (d. in or after 1235), translator, philosopher, and astrologer," *Oxford Dictionary of National Biography* (Oxford: Oxford University Press, 2004); and Charles Burnett, "Michael Scot and the Transmission of Scientific Culture from Toledo to Bologna via the Court of Frederick II Hohenstaufen," *Micrologus* 2 (1994), 101–126.

And then Herman the German came in and translated the works on ethics and rhetoric.[20]

So the university curricula, too, were based on philosophy – very much on Aristotle. And they really wanted to fill in all the gaps so that they had a complete Aristotle. We have two versions of the complete Aristotle, one called the *Translatio Vetus* and the other the *Translatio Nova* – or the *Corpus Vetus* and the *Corpus Nova*.[21] These included most of the works of Aristotle.

Other works – Plato, for example – were not so systematically translated. Plato was known more in bits and pieces; not until Ficino do we have an attempt to translate the whole of the Platonic dialogues.

But in medicine, for example, we have deliberate attempts to rediscover and translate what was the basic teaching of medicine in Greek Alexandria – the so–called "Sixteen Works of Galen," the essential works of Galen. These were translated, but mainly from Greek rather than from Arabic.

So at times you can see deliberate programmes, let's say, governed by what teaching was needed, especially in the universities. At other times, the translations were made more randomly. In fact, strangely enough, although in the Crusader states you had a perfect situation for people to look at Greek, Arabic, Syriac – not to mention other languages like Armenian or Ethiopian – in spite

[20] Hermannus Teutonicus, also known as Hermannus Alemannus (Herman the German; active ca. 1240–1256), was a prominent translator within the mid–thirteenth–century wave of Arabic–Latin translation activity. His translation of Aristotle's *Rhetoric* from Arabic into Latin (at points alongside the relevant tradition of Averroes's *talkhīs* / middle commentary) and, in 1256, his rendering of Averroes's commentary on the Poetics into Latin, contributed to granting scholastic circles earlier and more systematic access to Aristotelian rhetorical and poetic materials. In addition, Hermannus's translations of Averroes's Middle Commentary on the *Nicomachean Ethics* (1240) and the *Summa Alexandrinorum* (1243/44) were also influential in the circulation of Aristotelian ethical literature in the Latin world. See Dag Nikolaus Hasse, *Latin Averroes Translations of the First Half of the Thirteenth Century* (Hildesheim/Zürich/New York: Georg Olms Verlag, 2010), 16; Berthold L. Ullman, "Hermann the German's Translation of Aristotle's Poetics," *Estudis Romànics* 8 (1961), 43–48; and William F. Boggess, "Hermannus Alemannus's Rhetorical Translations," *Viator* 2 (1971), 227–250.

[21] In medieval Aristotelian scholarship, labels such as translatio vetus and translatio nova are typically *work–specific*: they distinguish an earlier Latin version of a given Aristotelian text from a later retranslation or revision. Thus, for example, Aristotle's *De anima* circulated in a translatio vetus produced from Greek in the mid–twelfth century (commonly associated with James of Venice) and later in revised or alternative versions, including thirteenth–century Greek–based translations associated with William of Moerbeke. More broadly, many Aristotelian works entered Latin Europe in multiple translations – some from Greek and, for certain materials, also through Arabic – so medieval readers often encountered more than one "Aristotle" in circulation rather than a single definitive text. For an overview, see: Robert Pasnau, "The Latin Aristotle," in *The Oxford Handbook of Aristotle*, ed. Christopher Shields (Oxford: Oxford University Press, 2012), 665–689.

of the resources, not many translations were made there. And those that were made were more sporadic: a large medical work by Ibn al–Abbas al–Majusi, and an astronomical work based on Ibn al–Haytham.[22] But in Toledo, on the other hand, you can see deliberate attempts to translate complete corpora of works which were regarded as essential for the teaching of different subjects.

> Toledo was a monastery, right?

Toledo? No, it was a cathedral.

> Yeah, but I wonder why the places of that transmission—the monasteries or courts—were the main centres rather than universities.

Well, it's entirely due to the fact that the universities were not in areas where you had Arabic scholars. Toledo was the perfect place because of interaction. Although in 1085 you have the Christian conquest of Toledo from the Arabs, many Arabs stayed. And certainly many of their books – their manuscripts – remained. Toledo had been a centre, under Islam, for astronomical research, in fact for observation of the stars. The Toledan Tables were brought into existence there, and there is some continuity between Islamic Toledo and Christian Toledo.[23]

But you also had Jews as well as Arabs in Toledo, so you had the manuscripts and the scholars. And what was very important was that most of the clergy who came to renew the Christian church came from outside Spain – from Europe, from Burgundy, from other parts of France. These people didn't know Arabic at all. So it was necessary to translate works for them, and they cer-

[22] ʿAlī b. al–ʿAbbās al–Majūsī (known in Latin sources as Haly Abbas; d. 384/994 (?)), one of the leading physicians of the Būyid period, is best known for the medical encyclopedia he composed for ʿAdud al–Dawla, the *Kāmil al–Sināʿa al–Tibbiyya* (also known as *Kitāb al–Malakī*). Conceived as a comprehensive teaching and reference work, the treatise systematically brings together theoretical medicine and clinical practice. In the Latin West, it first became known through Constantine the African's Liber pantegni; it was then retranslated in 1127 by Stephen of Antioch and circulated under the title Regalis dispositio / Liber regalis. C. Elgood, "ʿAlī b. al–ʿAbbās al–Madjūsī," *The Encyclopaedia of Islam*. New Edition (EI2) (Leiden: E. J. Brill, 1960), 1/381.

[23] The term "School of Toledo" is used not to denote a formal institution, but rather to refer to the Arabic–Latin translation activity that developed in Toledo after 1085 – especially in close connection with the cathedral milieu – and to the network of translators that formed around this enterprise. The city's multilingual social fabric (Arabic alongside local Romance vernaculars; including Mozarabs and Jews) and the availability of Arabic manuscripts and sources turned Toledo, from the second half of the twelfth century onward, into one of the principal centers for the Latin transmission of Arabic scientific and philosophical texts. In addition to Gerard of Cremona and Dominicus Gundissalinus, the activities of figures such as Mark of Toledo and Michael Scot in the early thirteenth century also point to the continuity of this cathedral–linked translation environment. Charles Burnett, "The Coherence of the Arabic–Latin Translation Program in Toledo in the Twelfth Century," *Science in Context* 14/1–2 (2001), 249–288.

tainly encouraged the translations and, in many cases, took these translated works back to their native lands.

But it is rare indeed for a translator to be immediately associated with a university. Herman the German, in the mid–thirteenth century, probably taught at the incipient University of Valencia. But the others – as you hint – the monasteries were more… no, well, not so much monasteries as cathedrals. Ecclesiastical places were more prominent as places for translation than universities themselves.

And as I mentioned, Hugh of Santalla was working for the bishop of Tarazona. Plato of Tivoli seems to have had some association with the cathedral of Barcelona. It is still a big question exactly what was happening in the cathedral of Toledo. But certainly Gerard of Cremona and Michael Scot after him – they were both clerics. They were employed by the cathedral and presumably had some pastoral duties as well.

> At the same time pastoral duties and all that… interesting. I'm going to ask it, but is it true that some scholars studied in Muslim schools—so–called madrasas? For example, I remember Raimund (Ramon) Llull: he learned Arabic and Islamic sciences, yes, and had an Arabic master for about nine years, if I remember well. And Adelard as well? Do we know the content or…?

Yes, well, Adelard says that he learned some things in Tarsus and Mopsuestia, which were then part of the Principality of Antioch.[24] I mean, the Christians formed just a very small group there. You would have Orthodox Christians and even, well, Arabic–speaking Christians. But the implication when he says, "I learned this from my Arabic masters," is that they were at least ethnic Arabs, or teachers whose first language was Arabic.

You can't always tell what religion they followed, because there were plenty of Arabic–speaking Christians and plenty of Arabic–speaking Jews. But to say

[24] Adelard of Bath (c. 1080–c. 1152) was one of the most important early mediators in the transmission of Islamic learning to Latin Europe. In the *Quaestiones naturales*, Adelard underscores his engagement with Arabic scientific and philosophical traditions through his reference to his "Arab masters." One of his most consequential contributions was producing one of the earliest – and most widely circulating – translation lines of Euclid's *Elements* into Latin from an Arabic exemplar. This text subsequently became one of the foundational pillars of mathematical instruction in the Latin West. Adelard also contributed to the establishment of a methodological horizon more open to observation and rational inquiry through his translations and adaptations of works related to astronomy, meteorology, and natural philosophy. Charles Burnett (ed. and trans.), *Adelard of Bath, Conversations with his Nephew: "On the Same and the Different," "Questions on Natural Science," and "On Birds"* (Cambridge: Cambridge University Press, 1998).

that they actually went to a madrasa – I don't know. Raimund Llull certainly learned his Arabic from maybe the servants in his household.[25]

Frederick II – the great emperor, whose kingdom was based in Palermo – he certainly learned his Arabic from Arabic scholars. There was someone called al–Urmawī, whom he actually brought over from, I think, somewhere in the Middle East in order to have someone who could teach him Arabic logic.

And this is all very, very good, in that an Arabic scholar called Ibn Yūnus, who was teaching in Mosul in the same period, says – well, it is said – that he taught the Jews the Torah, he taught the Christians the Bible, he taught the Muslims the Qur'an. He brought everybody together, yes, in his madrasa.

> So some researchers argue that without the Arabic transmission of knowledge, the development of the natural sciences would have been impossible. Is that a bit of an exaggeration, or can this be stated clearly or definitely?—I mean, regarding the natural sciences.

Natural sciences – of course, one is always looking at two aspects of Arabic science. There is the importance of the Arabs as preservers and transmitters of ancient Greek science. And then there are the excellent Arabic scientists who added to this knowledge, or indeed introduced new methods of observation – new scientific methods – as Ibn al–Haytham is said to have done, doing more than what the Greeks had done.

And so one could say that European knowledge or European scientific methodology could not have developed without this dual role of the Arabs: as transmitters of Greek knowledge and as scholars in their own right. You can certainly observe this in the case of astronomy. In astronomy you have very precise values of planetary movement, of the length of the year, of the solar year, of precession – of the very slow movement of the sphere of the fixed stars, and so on. And the West could not have – well, is incompletely indebted to Arabic sources for these developments in astronomy.

[25] Ramon Llull was a Majorcan polymath and an early Christian writer who sought sustained engagement with the Arabic language and with Islamic intellectual traditions. After a profound religious conversion, he devoted himself to developing a universal method of reasoning (Ars magna), intended to persuade non–Christians through rational demonstration rather than through mere polemics. According to the Vita coaetanea, Llull learned Arabic from a Muslim slave–teacher and thereby gained access to Arabic learning, including theological and scientific materials. His works thus combine an aspiration to intellectual engagement with Islam and an explicit missionary agenda. Ernesto Priani, "Ramon Llull," *The Stanford Encyclopedia of Philosophy* (Spring 2025 Edition), Edward N. Zalta and Uri Nodelman (eds.), accessed December 23, 2025.

You could say the same about medicine, too. So much was discovered in the Arabic world, as well as the rediscovery of Galen's works. But what the Arabs added in medicine was very detailed case studies. Razi was actually working in a hospital, and he recorded the development of diseases that he saw with his own eyes. This idea of collecting together all your experiences in the hospital – individual patients, how their diseases developed, and how they either led to death or eventually to cure – this is very, very important in the West for medical practice.

Medieval Universities and Madrasas

> About the universities, I would like to recall the debate on George Makdisi, who argued that the British colleges had their origins in the Islamic tradition—the madrasas. And this thesis has been challenged in many ways.

Yes.

> I remember Walter Rüegg's famous introduction to his monumental work A History of the University in Europe. Where he also challenges and criticises that interpretation.

Yes.

> It is certain that today's globalised Western university form has little to do with Islamic tradition, but how can we understand that influence at its origins—especially in the transition period from monastery to university? Is there any similarities? What is view on that?

The idea – well, the similarity – I think Makdisi bases his argument on the similarity of *waqf*, which is a kind of foundation in which everybody takes part, as it were.[26] I mean, it is non–hierarchical and it is independent of the mosque or whatever. But the whole idea of a foundation – of *waqf* – yes, it is a foundation made by a particular person. And he asks how similar that is to the university

[26] In *The Rise of Colleges*, George Makdisi triggered a substantial body of debate by arguing that certain forms of institutional organization in the Latin Middle Ages – especially the *college* – can be considered comparatively in relation to Islamic institutions of learning (including the madrasa and the *waqf* framework). Walter Rüegg, however, emphasizes that such claims of "similarity/affinity" can often confuse propter hoc with post hoc, and that, on their own, they do not demonstrate "how and to what extent later forms emerged from earlier models." He also notes that Makdisi's approach is particularly noteworthy insofar as it links not the university as such, but specifically the college institution, to Islamic models. George Makdisi, *The Rise of Colleges: Institutions of Learning in Islam and the West* (Edinburgh: Edinburgh University Press, 1981), 287 ff.; Walter Rüegg, "Themes," in *Universities in the Middle Ages*, ed. Hilde de Ridder–Symoens, *A History of the University in Europe*, (Cambridge: Cambridge University Press, 1992), 1/8.

system, where you have the university governed by the masters and pupils as a kind of institution. And if I remember correctly, he doesn't concentrate so much on the method of teaching or what is actually happening.

> Curriculum, maybe.

Yes. But there is another person called Christopher Beckwith who came up with – well, whose idea I regard as being, as it were, complementary or symmetrical to George Makdisi. And he claims that the scholastic argument, which develops and is very prominent in Western European universities in the Middle Ages – where you have rules for how to argue a case, and you have the pros and the cons, and the answers to the pros, the answers to the cons, and finally the conclusions, the conclusion of the master perhaps, but with the students involved in bringing forward arguments for or against a particular statement – he sees great similarities between these rules and procedures and what we find in the madrasa.

But he goes one step further and says that what we find in the madrasa itself had been influenced by earlier discussions in Sanskrit, which again are very detailed, but are, of course, Buddhist. And so we have this Buddhist influence on Islam and then on Christianity. And there is quite a lot to be said in favour of that.

One could also say that the fact that the madrasa was not just a place where Islamic theology was taught, but where the secular sciences were included in the education, may have been more conspicuous in the Islamic situation than in the contemporary Christian situation in the West.

> Okay, well, that might be an anachronism, but I'm asking to emphasise the distinction. Can medieval Arabic learning or Islamic studies generally be linked to later Orientalism?

Orientalism – yes. Well, I mean *Orientalism* in the rather negative sense: the fact that people thought – especially in the nineteenth or twentieth century – that Orientals were degenerate and irrational and too obsessed, as it were, with beautiful ladies in harems, and that they somehow didn't have the sort of fibre of Europeans, and so on.

I mean, *Orientalism*, I look upon in a very positive sense: as being interested, knowledgeable study of the Orient – *science* of the Orient, let's say – in all its positive aspects. And the enrichment of the West, indeed until recent times, by the experience not only of Arabic science and philosophy but also Arabic

literature, and even – dare I say – by the beauty of the Qur'an, which people do occasionally mention.

I'm just at the moment reading a book, a play by James Elroy Flecker called *Hassan* – I don't know if you know that one – written, I think, in 1930.[27] And this is entirely orientalistic: an Oriental society in which people fall in love and become like Majnun – they become mad in their love. But on the other hand, it is so rich in metaphor, and the Arabic language, Arabic literature, is so abundant in wonderful metaphor.

So, yes, to go back to what I said before: you can't really say that Orientalism impinges on European society before about the sixteenth century, when people were really interested in Oriental culture and adopted many aspects of it in art, clothing, and even ideas – like the importance of *tawhīd*, the unity of God. One could say that is Orientalism too.

But certainly, the idea that the Orient has something intrinsic to itself – different from the West, but admirable and potentially enriching to the West – is what I would emphasise.

Universal Knowledge and Intellectual Traditions

> I don't want to bring the subject up to date, but I feel I must ask: in the Islamic world and in non–Western countries in general today, there is a significant transfer of science and culture from the West.

Oh yes.

> How were Christian intellectual scholars in the Middle Ages so comfortable with transferring knowledge from the Islamic world? How did they distinguish between what was specifically Islamic and what was universal and acceptable to translate into a Christian context? It seems like non–Western societies struggle with this today. How was this managed?

Well, to go back to my first scholar – the first scholar that I studied – Herman of Carinthia. When he writes the *De Essentiis*, he quotes Arabic authorities; he

[27] James Elroy Flecker (d. 1915) was a British poet best known for his five–act play *Hassan: The Story of Hassan of Baghdad*, published posthumously in 1922. The play is set in an idealized "medieval Baghdad" and brings together Persian–Arabic motifs, romanticized "Oriental" settings, and a symbolic imaginative repertoire. Its relationship to early twentieth century "Orientalist" aesthetics has also been discussed in modern critical scholarship. James Elroy Flecker, *Hassan: The Story of Hassan of Bagdad and How He Came to Make the Golden Journey to Samarkand: A Play in Five Acts* (London: William Heinemann, 1922).

doesn't hide the fact that he gets information from the very texts that he translates. But he starts the work by saying that "*of course I utterly condemn Islam as a religion.*" But in spite of that he says the Arabs were aware of the truth – indeed a long time before Christians were, in certain cases.

He actually refers to Abu Ma'shar[28], the ninth–century Arabic astrologer, and his discussion of the star that appears in the sky in the constellation of Virgo as being a virgin with a child on her lap, and another constellation next to it which can be considered Joseph – who was *not* touching the virgin. Of course there is no contact between the two. And he dares to say that the Arab astronomers – going back even to Indian astronomers before them – were aware of the truth of the Virgin Birth because they saw it in the heavens ages before Christians were aware of the truth. Because you can't say they were Christians until after Christ was born.

But the essential point is: the Arabs turned to natural science and mathematics and astronomy and were aware of the truths in the world. That was what was most important. It was incidental that the Arabs were Muslims – especially because so many Arabic writers were Christians or Jews anyway; they simply happened to write in Arabic.

So you rarely find it stated that one shouldn't translate works from the Arabs because they are infidels or because they are Muslims.

You have, interestingly, the *reverse* of that: someone called Ibn ʿAbdūn in Seville in the early twelfth century, writing rules for the market sellers. And he says you shouldn't sell Arabic books to Christians and Jews because they then pretend that they have written them – yes, that *they* are the authors – and *they* don't acknowledge the Arabic source.

But the idea was really that when you are transmitting secular knowledge, this is independent of any religious consideration. It was universal knowledge that we all share.

And of course much of this knowledge was acknowledged to be ancient Greek.

[28] *The Kitāb al–Mudkhal al–kabīr ilā ʿilm aḥkām al–nujūm* (d. 272/886), attributed to Abū Maʿshar (known in the Latin tradition as Albumasar and often circulating under the title *Introductorium maius*), is among the influential texts in the medieval Latin astrological tradition. With its translation into Latin, Abū Maʿshar became a frequently cited authority among Latin authors and commentators, especially in the context of judicial astrology; and the framework through which he articulated the relationship between cosmology and astrology entered Western astrological literature through various channels of transmission and interpretation. Keiji Yamamoto et al. (eds.), *The Great Introduction to Astrology by Abū Maʿšar*, 2 vols. (Leiden/Boston: Brill, 2019).

But beyond ancient Greek you have all these stories about knowledge being passed – Aristotle himself being a pupil of, or passing on the works of, Hermes Trismegistus, who is completely legendary and far back in time. But Hermes himself was transmitting the works of someone called Agathodaimon, and there was another person called *Hadus*, and so on. Some of this knowledge went back to the Egyptians, some to the Indians, some to the Persians.

So there was an idea of collaborating – of being involved in an age–old transmission of wisdom. And this enormous stream included among its waters – among its waves – Muslims, Christians, Jews; Arabs, Spaniards, French, and so on. But indeed it was just a single stream.

> And Ibn Sina or Ibn Rushd—they were philosophers like the Greek philosophers, more than their Muslim identity.

They were never – well, maybe occasionally, yes – there are rumours or stories about their lives. But when they are quoted in works on philosophy, as they are very, very frequently, they are not criticised as being Muslims. They are criticised – well, there was a backlash against Aristotle, the Latin Averroists, and so on. And in 1277 you have this condemnation of 219 statements, and most of these actually come – there is a person called Guido who has lists of the *Errores Philosophorum* – lists of erroneous statements which come mainly from Arabic philosophers.[29]

But they are not erroneous *because* they are statements of Arabic philosophers, but because they appear to go against any religion which has a single God – like Christianity or Islam – or any religion in which creation is a prime tenet.

And this is basic, originally, to Aristotelianism: that the world has been eternal and will last forever. So Avicenna and Averroes are severely criticised, but not because they are Muslims – because they follow an Aristotelian tradition

[29] The heading *Errores philosophorum* ("Errors of the Philosophers") – as seen most notably in Aegidius Romanus's (Giles of Rome) compilation of that name – refers to a polemical catalogue tradition that identifies as "errors" a set of theses associated with Aristotelian philosophy and its commentary tradition which medieval theologians judged liable to conflict with Christian doctrine. These concerns are also closely connected to the broader climate of controversy crystallized in the 1277 condemnation issued by the Bishop of Paris, Étienne Tempier (censuring 219 theses). See Aegidius Romanus (Giles of Rome), Errores philosophorum, ed. Josef Koch, trans. John O. Riedl (Milwaukee, WI: Marquette University Press, 1944); see also John F. Wippel, "The Parisian Condemnations of 1270 and 1277," in *A Companion to Philosophy in the Middle Ages*, ed. Jorge J. E. Gracia et al. (Malden, MA: Wiley–Blackwell, 2005), 65–73.

in which there is no creation, in which God doesn't know singulars, in which a single intellect is shared by all people, and so on.

> So lastly, for someone interested in studying Arabic translations in Europe, where would you recommend they start? What kind of subjects or areas are still waiting to be researched? What are your recommendations?

Well, in fact, so much work has been done recently – one could say that this is a subject that has become more and more popular. One of my students, Dag Hasse, wrote this book called *Success and Suppression*, in which he shows the position of Arabic studies in the Renaissance, which had been a neglected area. Because people talk about the Renaissance as meaning "throwing away" all the things that originated among the Arabs and Muslims, and rediscovering the pure Greek knowledge. But in fact that's not true in certain areas. And then another person, Herald Kischlat, has looked at all the early printed editions of Arabic works and of translations of Arabic works.

There is always, of course, room for more editions. Avicenna's *Canon* and his *Shifa* – both enormous works – are so large that no one has dared to edit them fully. Bits and pieces have been edited over the last hundred years, but a complete edition is still lacking.

There is also this popularisation of Arabic–Islamic influence in something called *1000 Inventions*, which is both a book and a travelling exhibition, showing to what extent Arabic influence is visible in the modern world – whether you're talking about soap, steel, sutures for mending wounds, and so on. There is some controversy: some people think it goes too far. But there are so many aspects – paper, for example – where one can say, "Well, we got the idea from the Arabs," and this can stimulate people to say, "Let us look into these situations more carefully. Does soap really come from the Arabs? To what extent is paper an Arabic invention?" In fact, it is probably a Chinese invention.

But the result of modern scholarship is to stimulate people's ideas and reactions – either to say, "I look upon people in the Arabic–Islamic world differently now, because I realise just how much modern Western society, or global civilisation, owes to the contributions of Arabs and Muslims." Or, I suppose, people could react and say, "No, Westerners have always been Westerners."

One example of this controversy, which still continues, concerns the extent to which Copernicus – with his idea of a heliocentric universe – was indebted to Arabic astronomers. The jury is still out on that, I think. There is the danger of people becoming involved for political reasons, saying "The Arabs *must* have

been responsible for the new paradigms that Copernicus set up." Others say, "Just a minute – were there not mathematicians in the West who were able to develop these ideas independently?" So it can be quite a heated subject, with a lot of debate. And of course, there is a lot of room for research to try to resolve these questions.

> Thank you, Professor Burnett, for sharing your insights and experiences. And I know you are close to retirement. Your work has contributed greatly to our understanding of the historical connections between medieval Western and Islamic cultures. I appreciate your time and look forward to following your future research. Thank you.

Well, thank you very much and I wish you success in editing all the mistakes out. Thank you.

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