

ARABIC GALENISM FROM ANTIOCH TO BYZANTIUM: IBN BUṬLĀN AND SYMEON SETH

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Abstract

This paper investigates how Symeon Seth (second half of the eleventh century) introduced some Arabic medical heritage, especially Galenic, to Byzantium, which probably originated from his training in Antioch around 1060 with the famous Baghdadi physician Ibn Buṭlān. After providing new data on Seth's biography, our analysis focuses on his three main medical works, whose nature and reception were very different but which are all extensively based on Arabic science: the *Refutation of Galen*, the *On Foodstuffs* and the *On the Handbook of Health* (the latter being, as we show, a partial translation of Ibn Buṭlān's *Taqwīm al-Ṣiḥḥa*). We analyse the context of production of each of these three works, the way Seth uses and quotes (or does not quote) his Arabic sources, and their Byzantine reception.

Key Words

Symeon Seth, Ibn Buṭlān, Arabo-Greek translations, Arabic medicine, Byzantine medicine



Syméon Seth, authentique Byzantin par plus d'un trait, est bien représentatif d'une culture élargie et d'une génération qui, grâce au bilinguisme grec-arabe, s'efforce dans le domaine du merveilleux comme de la science de redécouvrir des vieilles solidarités orientales remontant à l'époque hellénistique ou romaine.¹

Symeon Seth, a Byzantine scholar of the second half of the eleventh century, is a key figure for understanding the transmission of Arabic scientific knowledge and

¹ GILBERT DAGRON, « Formes et fonctions du pluralisme linguistique à Byzance », *Travaux et Mémoires*, 12 (1994), p. 219–240, here p. 237.

methods into Byzantine culture. He is a multifaceted author whose major works cover a wide range of subjects, from natural philosophy with his *Synopsis of Physics* (*Conspectus rerum naturalium*), to astronomy with his *On the Utility of the Heavenly Bodies* (*De utilitate corporum caelestium*), medicine with his *On the Properties of Foodstuffs* (*De alimentorum facultatibus*) and literature with *Stephanites and Ichnelates*, to say nothing of several opuscles whose authorship is at times questionable. Being written in Greek, these works appear to bear a fairly strong link to the Arabic world. This is evident in *Stephanites and Ichnelates*, which is a Greek translation of the famous Arabic collection of fables entitled *Kalila wa Dimna* (and ultimately traced back to a Sanskrit original): its title says that it was offered to the Byzantine Emperor Alexios I Komnenos (r. 1081–1118).

But Arab authors are prominently featured in the other works of Seth, who generally refers to them as « the moderns » (οἱ νεώτεροι) and almost always agrees with them, albeit implicitly. Paul Magdalino has demonstrated that Seth mentions Arabic writings on astronomy in a rather neutral way in the *On the Utility of the Heavenly Bodies*, but in a much more open and favourable way in an opuscle entitled *On the fixed stars*, probably attributable to the same Seth, where the author corrects Ptolemy's data.² The latter work gives pride of place to astrology (whereas the *On the Utility of the Heavenly Bodies* hardly contains any astrological material) and Paul Madgalino judiciously used this to strengthen the generally-accepted identification between our author Symeon Seth and the *mathematikos* of the same name mentioned in her *Alexiad* by Anna Komnene (1083–c. 1153), Emperor Alexios I's daughter.³ The princess mainly refers to his talents as an astrologer: through his calculations, he was able to predict the death of the Norman adventurer Robert Guiscard, which happened on 17 July 1085. Anna Komnene also noted that Seth was one of the rising astrologers of her father's imperial court, and that he would often brag about his astrological skills.⁴ Similarly, in the field of optics, important connections with Arab theorists were recently highlighted by Roland Betancourt for several chapters of the *Synopsis of Physics*.⁵

² PAUL MAGDALINO, « The Byzantine Reception of Classical Astrology », in CATHERINE HOLMES, JUDITH WARING (eds.), *Literacy, Education and Manuscript Transmission in Byzantium and Beyond*, Brill, Leiden–Boston–Köln 2002, p. 33–57, here p. 46–49 and 51–54.

³ Although it has sometimes been assumed that there are two different Seths, we accept that Seth, the court astrologer of Alexios I, is also the author of the astronomical, physical and dietetical treatises and of the translation of *Kalila wa-Dimna*. On this identification, see for example MAGDALINO, « The Byzantine Reception », here p. 46–9.

⁴ ANNA KOMNENE, *Alexiad*, VI, 7, 1 and 4, ed. DIETHER R. REINSCH, ATHANASIOS KAMBYLIS, *Annae Comnenae Alexias. Pars prior: Prolegomena et textus*, De Gruyter, Berlin–New York 2001 (Corpus Fontium Historiae Byzantinae, 40/1. Series Berolinensis), p. 181–182.

⁵ ROLAND BETANCOURT, *Sight, Touch, and Imagination in Byzantium*, Cambridge University Press, Cambridge 2018, esp. p. 78–85 (chapter « Symeon Seth and the Arab World »).

But Seth's medical production is particularly relevant in terms of Arabic influence, as we shall see. Indeed, the history of medicine is a good vantage point from which to observe wider connections and continuities between the movement of Graeco-Arabic translations of Baghdad, their consequences, and the endeavor of later Arabo-Greek translators, of whom at least a few possessed links with Antioch. To explore the importation of Arabic medical knowledge in Byzantine science, Antoine Pietrobelli created a small team of research on Symeon Seth in 2013, together with Marie Cronier (CNRS, « Institut de recherche et d'histoire des textes », Paris), Alessia Guardasole (CNRS, « Orient et Méditerranée », Paris) and Caroline Magdelaine (Sorbonne Université, Paris). This research was part of a wider scientific project Antoine Pietrobelli was leading on Anti-Galenism, generously supported by the Institut Universitaire de France. Therefore, our first collective production was the critical edition, translation and commentary of Seth's short *Ἀντιρρητικὸς πρὸς Γαληνόν* or *Refutation of Galen*, published in 2015 in the journal *Galenos*.⁶ In this contribution, Antoine Pietrobelli suggested that such a Greek text was influenced by al-Rāzī's *Doubts on Galen*, noting some parallels between Seth's theoretical discussions and Ibn Buṭlān's dialogue, *The Doctor's Dinner Party*. He ventured even further and put forward the hypothesis that Seth might have been a disciple of Ibn Buṭlān. Besides their doctrinal affinities, they shared other similarities: both knew Greek and Arabic, both stayed in Antioch, Constantinople, and Egypt, and – most tellingly – their respective chronologies allow for the possibility that they met in Antioch at the end of Ibn Buṭlān's career. Since Ibn Buṭlān (c. 1001–1066) was a native of Baghdad and a disciple of Ibn al-Ṭayyib (980–1043), this evidence led Antoine Pietrobelli to formulate a hypothetical chain from master to disciple that could link the Nestorian translators of Baghdad to Symeon Seth.

This hypothesis was later bolstered by a second discovery. After the publication of the *Refutation of Galen* in 2015, our small Parisian team, now reduced to three members (since Caroline Magdelaine had to leave for personal reasons), decided to focus its attention on an unpublished and enigmatic text attributed to Symeon Seth, called *On the Handbook of Health by the Balance of the Six Causes*. By investigating the sources of this short Greek text, Antoine Pietrobelli discovered that it was a partial translation of the famous *Taqwīm al-Ṣiḥḥa* or *Tacuinum sanitatis* of Ibn Buṭlān. This new link between the Antiochian and the Baghdadi reinforced the previous hypothesis, and this paper gives us a good opportunity to deepen and question the role of Antioch as a relay between the Baghdadi and the Byzantine

⁶ MARIE CRONIER, ALESSIA GUARDASOLE, CAROLINE MAGDELAINÉ, ANTOINE PIETROBELLI, « Galien en procès à Byzance: l'*Antirrhétique* de Syméon Seth », *Galenos*, 9 (2015), p. 71–121. On the same text, see also PETROS BOURAS-VALLIANATOS, SOPHIA XENOPHONTOS, « Galen's Reception in Byzantium: Symeon Seth and his Refutation of Galenic Theories and Human Physiology », *Greek, Roman and Byzantine Studies*, 55 (2015), p. 431–469.

translators, and as a key element between the Graeco-Arabic scientific culture of Baghdad and specific interactions between Byzantine and Arabic cultures that took place after its Byzantine reconquest (969).

In this dual contribution, we would like to investigate Symeon Seth's role in the transmission of Arabic Galenism in Byzantine medicine, by examining the different reception of three of his medical treatises: *Refutation of Galen*, *On the Properties of Foodstuffs* and the translation of Ibn Buṭlān's *Taqwīm al-Ṣiḥḥa*. But, firstly, Ibn Buṭlān and Symeon Seth should be anchored in their respective and eventually mutual contexts to question anew their potential link.⁷

I. Antioch, Ibn Buṭlān and Symeon Seth

In the manuscripts, Symeon Seth is said to have been from Antioch.⁸ In the title of his works, the majority of manuscripts contain the adjective Ἀντιοχεύς (in the genitive: Ἀντιοχέως) beside his name. Rather than a patronymic (few manuscripts give Ἀντιόχου, « Antiochos », or Ἀντιοχείτου, « Antiochites », patronymic forms but likely corruptions), it should probably be seen as indicating that Symeon Seth was a native of Antioch, as is explicitly stated by other manuscripts: ἀπὸ Ἀντιοχείας.⁹ Such an interpretation would be quite consistent in historical terms.

After the reconquest of 969, Antioch¹⁰ was favoured by the *Basileis* during more than a century. The ancient city was a patriarchal seat, the administrative and

⁷ Parts 1, 2 and 4 were written by Antoine Pietrobelli, part 3 by Marie Cronier.

⁸ This information is not found in all the manuscripts, but no manuscript points to any other origin. Moreover, Symeon's first name is very popular in the Syrian region, where several monasteries are named after him: see JOSEPH NASRALLAH, « Couvents de la Syrie du Nord portant le nom de Siméon », *Syria. Archéologie, art et histoire*, 49 (1972), p. 127–159. The most famous of these is certainly that of Saint Symeon the Younger on the Wondrous Mountain, located about ten kilometres from Antioch and which enjoyed its golden age precisely in the tenth and eleventh centuries. This famous pilgrimage site is mentioned among others by Ibn Buṭlān (*ibid.*, p. 136) who, as we shall soon note, is the author of a comprehensive description of Antioch. This first name (Symeon) is used amongst Arab Christians in the form Ṣim'ūn. The sometimes-alleged Semitic origin of the figure relies solely on the name Σῆθ, by association with the Biblical character son of Adam. This name does not seem to be attested in Byzantium before the present figure, but it does not seem neither to be common in the medieval Jewish community (the *Jewish Encyclopedia* records only one man with this name, a rabbi in Aleppo in 1173). The patronymic « Seth » (or equivalent) does not seem to be attested among Arab Christians either.

⁹ E.g. Florence, Biblioteca Laurenziana, Plut. 7.19 (diktyon: 16042) (fol. 75r): τοῦ Ἀντιοχέως; Egypt, Alexandria, Library of the Patriarchate, 71 (diktyon: 32958) (fol. 152r): τοῦ ἀπὸ Ἀντιοχείας; Bruxelles, Royal Library Albert I^{er}, 1137–41 (diktyon: 9950) (fol. 278r): τοῦ Ἀντιοχείας, etc.

¹⁰ On Antioch in the Middle Byzantine period, see KLAUS-PETER TODT, « Das Patriarchat von Antiocheia in mittelbyzantinischer Zeit (969–1084) », *Byzantinische Zeitschrift*, 94 (2001), p. 239–267; ID., « Antioch in the Middle Byzantine Period (969–1084): the Reconstruction of the City as an Administrative, Economic, Military and Ecclesiastical Center », *Topoi. Supplement*, 5 (2004), p.

military center of the *doukaton* of Antioch and provided the Empire with a vast network of public lands. The region of the Doukate was very prosperous. The river Orontes supplied the fields with water in abundance and, from the eighth and ninth centuries, new plants were cultivated in the region such as cotton, citrus fruit, and sugar cane.¹¹ We can assume that this exotic production was exported to Constantinople, since citrus fruit and sugar cane are part of Seth's food catalogue,¹² which was written for a Byzantine audience. This acculturation of Eastern plant species in the region of Antioch is symptomatic of the role of the city as an in-between area.

After 969, the Muslim notables who ruled Antioch had to flee or were deported. Wealthy Melkite families replaced them at the head of the city, in collaboration with the Dukes of Antioch appointed by the emperor. One of these Christian Arab families were the Libellisioi. Michael Attaleiates, Seth's contemporary, portrayed Petros Libellisios, as « a Syrian man by race, who was a child of great Antioch and highly trained both in the Roman wisdom and education and in that of the Saracens ». ¹³ Petros Libellisios was bilingual and trained in both traditions: the Byzantine *enkyklios paideia* and the Arabic curriculum. We don't know the social milieu of Symeon Seth, but like his contemporary Petros Libellisios, he was

171–190; and ID., *Dukat und griechisch-orthodoxes Patriarchat von Antiocheia in mittelbyzantinischer Zeit (969–1084)*, Harrassowitz, Wiesbaden 2021 (Mainzer Veröffentlichungen zur Byzantinistik, 14); JEAN-CLAUDE CHEYNET, « Michel Psellos et Antioche », *Zbornik radova Vizantoloskog Instituta*, 50 (2013), p. 411–422; GILBERT DAGRON, « Minorités ethniques et religieuses dans l'Orient byzantin à la fin du X^e et au XI^e siècle: l'immigration syrienne », *Travaux et Mémoires*, 6 (1976), p. 177–216; EDUARDO PINZÓN AVENDAÑO, « Interacciones entre Bizancio y el islam en el medio letrado: Simeón Seth en el contexto del siglo XI », *Erytheia: Revista de estudios bizantinos y neogriegos*, 38 (2017), p. 51–74, spec. p. 53–7; ALEXANDRE M. ROBERTS, *Reason and Revelation in Byzantine Antioch. The Christian Translation Program of Abdallah Ibn al-Fadl*, University of California Press, Oakland 2020, p. 18–32; on the history of Antioch, see KLAUS-PETER TODT, BERND ANDREAS VEST, *Syria (Syria prōtē, Syria Deutera, Syria Euphratēsia)*, 3 vol., Österreichische Akademie der Wissenschaften, Vienna 2015 (Tabula Imperii Byzantini, 15).

¹¹ See ANDREW M. WATSON, *Agricultural Innovation in the Early Islamic World*, Cambridge University Press, Cambridge–New York 1983.

¹² *On the Properties of Foodstuffs*, chapters *περὶ κίτρων* and *περὶ τοῦ σάχαρ*.

¹³ MICHAEL ATTALAIATES, *Historia*, ed. EUDOXOS TSOLAKIS, *Michaelis Attaliatae Historia*, Academia Atheniensis Institutum Litterarum Graecarum et Latinarum Studiis Destinatum, Athens 2011 (Corpus fontium historiae Byzantinae, 50: Series Atheniensis), p. 87, l. 17–19; trans. TODT, « Antioch in the Middle Byzantine Period », p. 184.

Christian,¹⁴ at the very least bilingual¹⁵ and trained in Greek *paideia* as well as in Arabic literary and scientific culture. Antiochene libraries were full of Arabic, Syriac, Georgian, and Greek books, and many manuscripts were copied or translated in the monasteries around the Black Mountain.¹⁶

One of the most vivid descriptions of Antioch during the Middle Byzantine period comes from Ibn Buṭlān.¹⁷ He describes the bulwark of the Byzantine citadel,

¹⁴ Dimitris Krallis argues that Symeon Seth « was a Roman of Jewish faith »: see DIMITRIS KRALLIS, *Serving Byzantium's Emperors. The Courtly Life and Career of Michael Attaleiates*, Palgrave Macmillan, London 2019, p. 17; see also ROBERT SINGERMANN, *Jewish Translation History: A Bibliography of Bibliographies and Studies*, John Benjamins Publishing Company, Amsterdam-Philadelphia 2002, p. 69 and n. 496, who rightly points out: « It should be emphasized that none of these sources corroborate the assertions by Jacob and Rappoport that Symeon Seth was Jewish ». Actually, there is evidence to suggest that Seth was a Christian, such as the clausula of his *Refutation of Galen* (§ 12: Μόνος γὰρ ὁ θεὸς αἰεὶ κατὰ τὸν αὐτὸν τροπὸν ἐνεργεῖ τὸ ἀγαθόν; ed. CRONIER *et al.*, « Galien en procès », p. 121, l. 94). Symeon Seth also owned a Gospel book and a *Menologion* by Symeon Metaphrastes, see *ibid.*, p. 87 and PAUL GAUTIER, « La Diataxis de Michel Attaliat », *Revue des études byzantines*, 39 (1981), p. 5–143, here p. 126–127. Finally, he includes a notice on pork meat in *On the Properties of Foodstuffs* (περὶ τοῦ χοιρείου κρέατος; *Simeonis Sethi Syntagma de alimentorum facultatibus*, ed. BERNHARDUS LANGKAVEL, in aedibus B. B. Teubneri, Lipsiae 1898, p. 119–121).

¹⁵ In addition to Greek and Arabic, it is not impossible that Seth knew Syriac, like many Melkites, who inhabited Antioch's region; on the liturgical languages of the Melkites, see JOSEPH NASRALLAH, *Histoire du mouvement littéraire dans l'Église melchite du V^e au XX^e siècle*, vol. III, t. 1: (969–1250), Peeters, Louvain-Paris 1983, p. 359–386.

¹⁶ SEBASTIAN P. BROCK, « Syriac Manuscripts Copied on the Black Mountain, near Antioch », in REGINE SCHULZ, MANFRED GÖRG (eds.), *Lingua restituta orientalis: Festgabe für Julius Assfalg*, Harrassowitz, Wiesbaden 1990, p. 59–67; JOE GLYNAS, « Byzantine Monasticism on the Black Mountain West of Antioch in the 10th–11th Centuries », *Studies in Late Antiquity*, 4/4 (2020), p. 408–451; ROBERTS, *Reason and Revelation*, p. 29–32 about multiculturalism within the region at that time; see also BERNARD FLUSIN, « De l'arabe au grec, puis au géorgien: une Vie de saint Jean Damascène », in GENEVIÈVE CONTAMINE (ed.), *Traduction et traducteurs au Moyen Âge. Actes du colloque international du CNRS organisé à Paris, Institut de recherche et d'histoire des textes les 26–28 mai 1986*, CNRS Éditions, Paris 1989, p. 51–61. On Antioch as a center for Arabo-Latin translations in the following period, see CHARLES BURNETT, « Antioch as a link between Arabic and Latin Culture in the Twelfth and Thirteenth Centuries », in ISABELLE DRAELANTS, ANNE TIHON, BAUDOUIN VAN DEN ABBEELE (eds.), *Occident et Proche-Orient: contacts scientifiques au temps des Croisades*, Brepols, Turnhout 2000, p. 1–78; *Id.*, « Stephen, the Disciple of Philosophy, and the Exchange of Medical Learning in Antioch », *Crusades*, 5 (2006), p. 113–129.

¹⁷ Our main source on Ibn Buṭlān is IBN ABĪ UṢAYBĪ 'A'S *History of Physicians*, c. 10, 38, see the online Brill edition: EMILY SAVAGE-SMITH, SIMON SWAIN, GEERT J. VAN GELDER (eds.), *A Literary History of Medicine: The 'Uyūn al-anbā' fī ṭabaqāt al-aṭibbā' of Ibn Abī Uṣaybi'ah*, Brill, Leiden 2020, <https://doi.org/10.1163/37704_0668IbnAbiUsaibia.Tabaqatalatibba.lhom-tr-eng1> (accessed October 2021); see also JOSEPH SCHACHT, s. v. « Ibn Buṭlān », *Encyclopédie de l'Islam*, t. III, Brill, Leiden 1975, p. 763–764; FUAT SEZGIN, *Alī Ibn Ridwān (d. c. 453/1061) and al-Mukhtār Ibn Buṭlān (d. 458/1066). Texts and Studies*, Institute for the History of Arabic-Islamic Science at the Johann Wolfgang Goethe University, Frankfurt-am-Main 1996; LAWRENCE I. CONRAD, « Scholarship and social context:

rebuilt in 971 by John I Tzimiskes, praises the beauty of the public baths, and mentions the presence of a clepsydra on the door of St. Peter's Cathedral, as well as a huge hospital.¹⁸ After he left Baghdad, Ibn Buṭlān led an itinerant lifestyle, trying to be recruited as a physician by powerful sovereigns in Syria or in Egypt. He first visited Antioch in 1049 on his way to Cairo and passed through a second time on his return in 1050–1053. During his stay in Cairo, he had a famous and violent medical quarrel with the Egyptian Ibn Riḍwān,¹⁹ whom he nicknamed « Crocodile of the Jinn ». After his stay in Egypt, he spent some time in Constantinople. When he arrived in the *Basileuoussa*, the city was facing a smallpox epidemic, which Ibn Buṭlān connected to an extraordinary celestial phenomenon: the apparition of the Supernova in 1054.²⁰ At this time, he wrote a treatise *On the Eucharist*²¹ at the behest of the Patriarch Michael Keroullarios, to diffuse the orthodox positioning of the Patriarch in Arabic language after the East-West Schism of 1054. He was still in Constantinople when he finished his *Doctor's Dinner Party* in 1058 in the « monastery of the Benevolent Emperor Constantine on the outskirts of Constantinople », if we follow Ibn Abī Uṣaybi'a.²²

But Ibn Buṭlān spent the last part of his life in Antioch, where he died on 2 September 1066. His presence is well attested in 1063: at this time, he had been establishing a hospital in the city, and he wrote a treatise very significantly entitled « On the reasons that skillful physicians now treat with cold remedies most of the diseases – such as hemiplegia, facial paralysis, [...] and others – which

a medical case from the eleventh-century Near East », in DON BATES (ed.), *Knowledge and the scholarly medical traditions*, Cambridge University Press, Cambridge 1995, p. 84–100; ID., « Ibn Buṭlān in Bilād al-Shām: The Career of a Travelling Christian Physician », in DAVID THOMAS (ed.), *Syrian Christians under Islam*, Brill, Leiden–Boston–Köln 2001, p. 131–157; FLORÉAL SANAGUSTIN, *Médecine et société en islam médiéval. Ibn Butlān ou la connaissance médicale au service de la communauté: le cas de l'esclavage*, Geuthner, Paris 2010.

¹⁸ His description of Antioch is preserved in a letter to his friend Hilāl al-Sābī', in which he recounts his journey from Baghdad to Cairo in 1049; for an English translation of this letter, see GUY LE STRANGE, *Palestine under the Moslems. A Description of Syria and Holy Land from A. D. 650 to 1500. Translated from the Works of the Medieval Arab Geographers*, A. P. Watt for the Committee of the Palestine Exploration Fund, London 1890, p. 370–375.

¹⁹ JOSEPH SCHACHT, MAX MEYERHOF, *The Medico-Philosophical Controversy between Ibn Butlan of Baghdad and Ibn Ridwan of Cairo. A Contribution to the History of Greek Learning Among the Arabs*, Egyptian University, Cairo 1937. On Ibn Riḍwān, see IBN ABĪ UṢAYBI'Ā, *History of the Physicians*, 14, 25; GIUSEPPE GABRIELI, « Medici e scienziati Arabi: Ali ibn Ridwan », *Isis*, 16/1 (1924), p. 500–506; MICHAEL W. DOLS, *Medieval Islamic Medicine: Ibn Riḍwān's 'On the Prevention of Bodily Ills in Egypt'*, University of California Press, Berkeley 1984, p. 54–55; and JACQUES GRAND'HENRY, *Le Livre de la méthode du médecin de 'Alī B. Riḍwān (998–1067). Texte arabe édité, traduit et commenté*, Université catholique de Louvain, Institut orientaliste, Louvain-La-Neuve 1984, t. I.

²⁰ See IBN ABĪ UṢAYBI'Ā, *History of the Physicians*, 10, 38, 4.

²¹ A partial edition is provided by GEORG GRAF, « Die Eucharistielehre des nestorianers Al-Muḥtār Ibn Buṭlān (11. Jahrh.) », *Oriens Christianus*, 35 (1938), p. 44–70 and 175–191.

²² IBN ABĪ UṢAYBI'Ā, *History of the Physicians*, 10, 38, 6 (n° 10).

in olden times were treated with hot remedies and contravene the rules laid down by the ancients ». ²³ He might have settled in Antioch before the sixth decade of the eleventh century, and these years (1058–1066) seem the most favorable for envisioning a permanent link with Symeon Seth and direct teaching. One of his poems says:

When I should die and go to my grave,
No one will mourn or my vigil keep,
Save my medical comrades and books:
All of these will be left to weep. ²⁴

Symeon Seth may have been one of those medical comrades who lamented the death of Ibn Buṭlān in 1066. Let's turn to his biography to question the possibility of this intellectual encounter.

Unfortunately, Seth is not mentioned in the *History of the Physicians* of Ibn Abī Uṣaybi'a. His chronology is limited to his prediction of Robert Guiscard's death (1085) and to the description of an eclipse he observed when he was in Egypt. ²⁵ Until recently, ²⁶ this eclipse was dated to 25 February 1058 and Seth's career was anchored by this one precise date. But in 2009, Anne Tihon ²⁷ proposed another eclipse which better corresponded to Seth's information, and happened on 16 February 1086, twenty-eight years later. In a recent paper, Jakub Sypianski ²⁸

²³ Ibid., and CONRAD, « Ibn Buṭlān in Bilād al-Shām », p. 146.

²⁴ IBN ABĪ UṢAYBĪ'A, *History of the Physicians*, 10, 38, 5; trans. CONRAD, « Ibn Buṭlān in Bilād al-Shām », p. 156.

²⁵ SYMEON SETH, *Synopsis of Physics*, 49, ed. ARMAND DELATTE, *Anecdota Atheniensia et alia, t. II: Textes grecs relatifs à l'histoire des sciences*, Bibliothèque de la Faculté de Philosophie et Lettres de l'Université de Liège, Liège-Paris 1939, p. 53, l. 9–13: Οὐκ ἐν πάσῃ δὲ τῇ οἰκουμένη ὁ ἥλιος ἐκλείπων φαίνεται, ἀλλὰ παρὰ μέρεσι τισι. Καὶ γὰρ ἐνταῦθα ἐπὶ τῆς τοῦ Κομνηνοῦ βασιλείας ὅλος ἐκλείψας πρὸς δυσμαῖς, ἐν Αἰγύπτῳ οὐχ ὅλος ἐξέλιπεν, ὡς ἐκεῖσε παραγεγὼς ἠκριβωσάμην.

²⁶ See for example: DELATTE, *Anecdota Atheniensia et alia*, p. IX n. 5; PAUL MAGDALINO, « The Porphyrogenita and the Astrologers: A Commentary on *Alexiad* VI. 7. 1-7 », in CHARALAMBOS DENDRINOS, JONATHAN HARRIS, EIRENE HARVALIA-CROOK, JUDITH HERRIN (eds.), *Porphyrogenita. Essays on the History and Literature of Byzantium and the Latin East in Honour of Julian Chrysostomides*, Ashgate, Aldershot 2003, p. 15–31, here p. 20 and fn. 13; FREDERICK LAURITZEN, « Between the Past and the East: Symeon Seth's Nutritional Advice for Michael VII Doukas », in BRIGITTE PITARAKIS (ed.), *Life is short, art is long: The Art of Healing in Byzantium*, Istanbul 2015, p. 124–133, here p. 125; CRONIER et al., « Galien en procès », p. 85.

²⁷ ANNE TIHON, « Les sciences exactes à Byzance », *Byzantion*, 79 (2009), p. 380–434, here p. 396, fn. 44: « L'éclipse de 1086 était totale à Constantinople (milieu ca 16h30) et partielle à Alexandrie; l'éclipse de 1058 n'était totale ni à Constantinople, ni à Alexandrie, et la différence de grandeur, peu perceptible. Le nom d'Isaac Comnène n'apparaît pas dans tous les manuscrits et A. Delatte ne l'a pas repris dans le texte de son édition ».

²⁸ JAKUB SYPIANSKI, « Ibn Buṭlān et Syméon Seth », in MARIE CRONIER, ALESSIA GUARDASOLE, ANTOINE PIETROBELLI (eds.), *De Bagdad à Constantinople: le transfert des savoirs médicaux (XI^e-XV^e s.)*, Orient & Méditerranée, Paris [forthcoming].

argued that this dated event in Seth's life should be placed in 1086 rather than in 1058, but he didn't draw all the necessary conclusions for Seth's biography. This new dating implies that Seth's *Synopsis of Physics*, written after the trip to Egypt (in 1086), was not offered to Isaac I Komnenos (r. 1057–1059), as previously thought, but rather to Alexios I Komnenos (r. 1081–1118). This dedication would definitively be a better fit, considering Seth's portrait in the *Alexiad* of Anna Komnene, mentioned in the introduction.

Unlike Ibn Buṭlān, Symeon Seth was lucky enough to enjoy an imperial career (probably because he knew Greek better than the Baghdadi did, which facilitated his integration into Greek society). The subscriptions of the manuscripts mention his titles: he is called *vestes*, *protovestarches*, *magistros* and *philosophos*, four titles linked to an official position in the imperial administration. Consequently, it is most probably in the context of a Byzantine embassy that Seth went to Egypt in 1086: indeed, such an embassy, although it is not otherwise attested, is most likely to have been established at that moment, since the capture of Antioch by the Turks in 1084 gave the Byzantines good reasons to seek an alliance with the Fatimid caliphate of al-Mustansir (r. 1036–1094).

Moreover, Seth might have received, as an imperial gratification, some property in Rhaidestos in Thrace, like his contemporary Attaleiates. According to its title in several manuscripts, *On the Properties of Foodstuffs* is dedicated by Seth to the emperor Michael <VII> Doukas (r. 1071–1078), to whom Attaleiates also offered a synopsis of law known as *Ponema nomikon*. Seth's career in Constantinople likely started in the 1070s, and continued until the end of the eleventh century, or even the beginning of the twelfth. These new data on Seth's biography reduce his period of activity to a more reasonable timeframe and better suit Anna Komnene's account, which situated his *floruit* at the beginning of her father's reign (1081–1118).

Above all, this chronology allows us to consider the possibility that Seth could have been one of Ibn Buṭlān's last disciples, during the 60s in Antioch or maybe even before. After this historical reminder, let us turn to Seth's medical texts, their content, and their differentiated reception in Byzantium. An investigation on the reception of Seth's treatises will better explain his cultural milieu and the specificities of his contribution.

II. The 'Refutation of Galen' and its Constantinopolitan Context

Seth's medical production is very original since he introduced Byzantine culture to a new approach to Galen. His medical works show that he was well trained in the theory of medicine, but not necessarily that he himself practiced medicine. Through his other treatises, Seth demonstrates a wide range of interests: Arabic

adab, natural philosophy and astronomy. He appears to have been more of a polymath scholar than a proper physician, like Ibn Buṭlān.

In Symeon Seth's epistemology there were ancients, like Galen, and moderns (οἱ νεώτεροι) – who turned out to be none other than the Arabs. By imitating al-Rāzī's *Doubts on Galen* in his *Refutation of Galen*, Symeon Seth initiated a critical view of Galenic medicine. Since the fourth century and Oribasius' *Medical Collections*, the Byzantines (Alexander of Tralles, Aetius of Amida, Paul of Aegina, Theophilus Protospatharios, Theophanes Chrysobalantes) had mostly used Galen by compiling or epitomizing his titanic corpus in their encyclopedias, without opposing or questioning him. However, Seth created a new method to deal with Galen's authority and to challenge it.

In his *Refutation of Galen*, Seth twice mentions Aristotle to contradict Galen's theory of generation and embryology. His *Synopsis of Physics* goes even further, referring to Aristotle thirteen times, quoting the *Meteorologica*, *De caelo*, *De anima*, *Analytica posteriora* and *Parva naturalia*. It is safe to say that this book is mostly based on Aristotle's authority. Seth's production attests to a good knowledge of Galen and Aristotle; by attacking the former with the later in his *Refutation*, he seems to endorse the position of Arabic philosophers. Al-Kindī, al-Fārābī, Avicenna and, later, Maimonides and Averroes mostly denied Galen's claim to be a philosopher:²⁹ in the field of medicine, Galen was an authority for the Arab scholars, but when he contradicted Aristotle in philosophical matters, he could almost never compete with the master of Stagira.

The *Refutation of Galen* was composed for a Constantinopolitan audience, but not publicly diffused since the text is only preserved in a unique manuscript from the fifteenth century. The prologue can be read as a documentation of Galen's reception in Constantinople during the second half of the eleventh century. Seth addresses Galen in such terms:

But since I noticed that you enjoyed an excellent reputation with many people, that your name was on almost everyone's lips, that you were considered faultless in every respect and praised as superhuman, I had to address your supporters.³⁰

Seth attacked his Greek contemporaries because of their dogmatic reading of Galen. According to his testimony, the physician of Pergamum was unquestioningly admired in Constantinople. It may well be that Michael Psellos (1018–1078), who belonged to the previous generation, or his followers, were the target of Seth's diatribe. Psellos was the major intellectual figure in Constantinople

²⁹ See, for example, my introduction to the volume ANTOINE PIETROBELLI (ed.), *Contre Galien. Critiques d'une autorité médicale de l'Antiquité à l'âge moderne*, Honoré Champion, Paris 2020.

³⁰ SYMEON SETH, *Refutation of Galen 2*, ed. CRONIER et al. p. 109, l. 8-p. 111, l. 2 (my translation).

at that time and the first Byzantine thinker to use Galen extensively in his work.³¹ His disciple John Italos also quoted Galen,³² whilst Theophylact of Ohrid, another disciple, wrote a letter to the court physician Nicholas Kallikles asking to borrow some Galenic manuscripts.³³ Theophylact even composed a short poem in praise of Galen.³⁴ Psellos's circle had a clear interest in Galen. But another piece of evidence designates Psellos and his school as Seth's target. In a recent paper, Dionysios Stathakopoulos noted that Michael Psellos sided twice with Galen against Aristotle. In his *Funeral Oration for John Xiphilinus*, from 1075, Psellos writes:

But as far as the nature of man is concerned, I must admit that the doctor from Pergamos dealt with that subject in his treatise on the utility of the members of the body more accurately than Aristotle.³⁵

The *Refutation of Galen* could thus be interpreted as evidence of a confrontation between Psellos' « Neoplatonicist circle »³⁶ and Seth's Arabic Aristotelianism in Constantinople in the 1070s or 1080s. Seth's attacks on his Byzantine contemporaries reflect a confrontation between two conceptions of knowledge.

³¹ DIONYSIOS STATHAKOPOULOS, « Galen in Non-Medical Byzantine Texts, 600–1453 », in PETROS BOURAS-VALLIANATOS, BARBARA ZIPSER (eds.), *Brill's Companion to the Reception of Galen*, Brill, Leiden 2019, p. 140–159, esp. p. 144–146. On Psellos's medical culture, see ROBERT VOLK, *Die medizinische Inhalt der Schriften des Michael Psellos*, Institut für Byzantinistik und neugriechische Philologie der Universität, Munich 1990 (Miscellanea Byzantina Monacensia, 32).

³² John Italos, in *Questions and answers* (55), used Galen's *Introduction to Logic* and his fourth syllogism; see STATHAKOPOULOS, « Galen in Non-Medical Byzantine Texts », p. 146.

³³ And especially his treatise *On the Doctrines of Hippocrates and Plato*; see THEOPHYLACT OF OHRID, *Letters*, 112, ed. PAUL GAUTIER, *Théophylacte d'Achrida. Lettres*, Association de Recherches Byzantines, Thessalonique 1986 (Corpus Fontium Historiae Byzantinae, 16/2: Series Thessalonicensis), p. 536–537; on Theophylact of Ohrid, see also DIMITRI OBOLENSKY, *Six Byzantine Portraits*, Clarendon Press, Oxford 1988, p. 34–82, esp. p. 55–6.

³⁴ THEOPHYLACT OF OHRID, *Poems*, p. 3 (ed. PAUL GAUTIER, *Théophylacte d'Achrida. Discours, traités, poésies*, Association de Recherches Byzantines, Thessalonique 1980 [Corpus Fontium Historiae Byzantinae, 16/1: Series Thessalonicensis], p. 350–351); see STATHAKOPOULOS, « Galen in Non-Medical Byzantine Texts », p. 146 and WANDA WOLSKA-CONUS, « Les écoles de Psellos et de Xiphilinos sous Constantin IX Monomaque », *Travaux et Mémoires*, 6 (1976), p. 223–243.

³⁵ MICHAEL PSELLOS, *Funeral Speech on Xiphilinos*, p. 24, ed. IOANNIS POLEMIS, *Michel Psellus. Orationes funebres. Volumen I*, De Gruyter, Berlin 2014, p. 160; trans. by ANTHONY KALDELLIS, IOANNIS POLEMIS, *Psellos and the Patriarchs: Letters and Funeral Orations for Keroullarios, Leichoudes, and Xiphilinos*, University of Notre Dame Press, Notre Dame, Indiana 2015, p. 221): Τὰ δὲ περὶ ἀνθρώπων φύσεως ὁ ἐκ Περγάμου Ἀσκληπιάδης κάλλιον Ἀριστοτέλους φυσιολογεῖ ἐν τῷ Περι χρείας μορίων συντάγματι.

³⁶ The widely-held view that Psellos was a Neoplatonist needs to be significantly moderated: he is a careful reader of Proclus, but not without criticism. See for instance the analysis by MICHELE TRIZIO, *Il neoplatonismo di Eustrazio di Nicea*, Edizioni di Pagina, Bari 2016, p. 55–8. It is nevertheless certain that Psellos generally expresses a certain contempt for Aristotle.

III. 'On the Properties of Foodstuffs' and its Arabic Background

III.1. Nature of the work

This treatise is, without doubt, the most widely circulated of Seth's works. There are about one hundred handwritten witnesses, which is considerable for a secular Greek work.³⁷ According to some manuscripts, the work is dedicated to the emperor Michael VII Doukas.³⁸ This should give us a rather limited range to date, if not the composition, at least the completion of this treatise: it would thus predate, for example, the Greek translation of the Arabic collection of animal fables *Kalila wa Dimna* that Seth dedicated to Alexios I Komnenos. However, it should be noted that most of the manuscripts, especially among the earliest witnesses, do not indicate any addressee: it is therefore possible that the mention of Michael Doukas was a later addition. In the absence of an exhaustive analysis of the manuscript tradition, it can be assumed that Michael Doukas was possibly, but not certainly, the original addressee of the treatise.

Unlike *Stephanites and Ichneutes*, *On the Properties of Foodstuffs* is not a translation but an original work by Seth. In the prologue, Seth explains that many authors have dealt with this subject, not only Greek but also Persian, Arab and Indian (οὐ Ἑλλήνων μόνον ἀλλὰ καὶ Περσῶν καὶ Ἀγαρηνῶν καὶ Ἰνδῶν), but as they differed and none of the previous works was perfect, he himself had collected the best of these writings.³⁹ This clearly suggests that at least some of his sources for this treatise are of Eastern origin, but in the text itself no Eastern author is ever namely mentioned by Seth. Direct use of Indian or Persian sources can be ruled out from the outset for historical verisimilitude. On the contrary, it seems very likely that

³⁷ A (non-definitive) list of manuscripts can be found for example in the *Pinakes* online database (<<https://pinakes.irht.cnrs.fr/notices/oeuvre/12757/>> accessed October 2021).

³⁸ Michael Doukas is mentioned as a dedicatee in 17 manuscripts. Two manuscripts mention Constantine Porphyrogenetos (in connection with the treatise *On Foodstuffs* by Theophanes Chrysobalantes, dedicated to this emperor?); one manuscript mentions Manuel Doukas (c. 1187–1241) and another Manuel Porphyrogenetos. Nine manuscripts mention Constantine Monomachos as dedicatee, but they transmit a revised version placed under the name of Michael Psellos).

³⁹ *Simeonis Sethi Syntagma de alimentorum facultatibus*, ed. LANGKAVEL, p. 1; French translation: MARC-ÉMILE-PROSPER-LOUIS BRUNET, *Syméon Seth, médecin de l'empereur Michel Doukas. Sa vie, son œuvre*, Université de Bordeaux, Faculté de médecine et de pharmacie, Bordeaux 1939, p. 40–119, esp. p. 40–41; Spanish Translation (prologue only): PINZÓN AVENDAÑO, « Interacciones », p. 63–4. For an analysis of the preface and its variants, see: MARIE CRONIER, « Influences arabes dans le traité *Sur les aliments* de Syméon Seth », in MARIE CRONIER, ALESSIA GUARASOLE, ANTOINE PIETROBELLI (eds.), *De Bagdad à Constantinople. Le transfert des savoirs médicaux (XI^e-XV^e s.)*, Orient & Méditerranée, Paris [forthcoming].

Seth made direct use of Arab medical authors (who in turn had made use of Indian and Persian sources translated into Arabic).⁴⁰

After the prologue, the treatise consists of a succession of about 150–160 chapters (there are important variations in the manuscripts) – each one being devoted to a given foodstuff and describing its main properties.⁴¹ A comparison with the text of Dioscorides' *On Medical Matter* and Galen's *On Simple Medicines* and *On Foodstuffs* confirms that, in general, Symeon Seth depends very heavily on these three works, but not in a strict manner: Seth often provides the same information as Dioscorides and/or Galen, but in a different wording, with omissions and, above all, numerous additions. By contrast, the connections with Hippocrates' treatise *On Regimen* are less convincing. It is therefore certain that Seth resorted to other sources in addition to these classical authors: the prologue's statements suggest that we should seek them out among Arab writers.

III.2. Elements of Arabic origin

Indeed, there are many 'Arabic' elements in this treatise. For instance, Symeon's alphabetical order does not come from Dioscorides (whose treatise is thematically ordered) nor from Galen's *On Foodstuffs* (also thematically ordered, in three books), but is reminiscent of Galen's treatise *On Simple Medicines*, in which the chapters follow each other in alphabetical order. However, in Galen's treatise plants, animals, and minerals are separated into different groups: on the contrary,

⁴⁰ Seth's reliance on Arabic sources for his treatise *On the Properties of Foodstuffs* is commonly accepted but has so far been only very incompletely demonstrated. The standard publication is still the work of Georg Harig (GEORG HARIG, «Von den arabischen Quellen des Simeon Seth», *Medizinhistorisches Journal*, 2/3–4 [1976], p. 248–268) which draws on an analysis of the grades Seth gives for the four primary qualities of the simples (hot or cold, dry or wet). By comparison with medieval Arabic medical works (but only through their medieval Latin translations), Harig has shown that the data provided by Seth most often resembles the Arab authors in diverging from Galen.

⁴¹ One must keep in mind that the authoritative Greek edition (Langkavel's), on which the majority of recent studies are based, is very poorly reflective of the manuscript tradition and includes many chapters that have a very limited manuscript transmission. In particular the chapter on cannabis, which has been extensively commented on in recent literature (e.g. DAVID DEAKLE, «Simeon Seth on Cannabis [Cognoscenti of Cannabis II]», *Journal of Cannabis Therapeutics*, 1/2 (2001), p. 15–20), is most likely to be inauthentic. This chapter has only been found up to now in two manuscripts: Modena, Biblioteca Estense, α.U.9.4 (61) (diktyon: 43471) and Milano, Biblioteca Ambrosiana, T 19 sup. (diktyon: 43244), both copied in the West in the late fifteenth or early sixteenth century. – If one cannot resort to the manuscripts (which is of course ideal), it is preferable to refer to Bogdanus' edition: MARTINUS BOGDANUS (ed.), *Συμεώνος μαγίστρου Αντιοχείας τοῦ Σηθὶ Σύνταγμα κατὰ στοιχείων περὶ τροφῶν δυνάμεων*, *Simeonis Sethis Magistri Antiocheni volumen de alimentorum facultatibus iuxta ordinem literarum digestum [...]*, Lutetiae Parisiorum, Ex offic. Dion. Bechet & Lud. Billanii 1658.

Symeon Seth's organisation in a single alphabetical block is that of most of the Arabic treatises on simples or on foodstuffs.

Is it possible to identify more precisely the 'Oriental' sources of Seth? In the chapters, Seth mentions only Greek or supposedly Greek authors by name: Galen, Hippocrates, Dioscorides, Oribasius, but also, in a more enigmatic way, Democritus, Rufus, Proclus and a certain « Constans the Roman ». ⁴² On the other hand, he never quotes oriental authors by name, but makes a few rare references (about ten in all) to « the Indians » in a general way (οἱ Ἰνδοί, παρ' Ἰνδοῖς, παρὰ τῶν Ἰνδῶν), « the Egyptians » (οἱ Αἰγύπτιοι, παρ' Αἰγυπτίων, οἱ ἐν Αἰγύπτῳ), « the Persians » (οἱ Πέρσαι). Sometimes he refers to « recent authors » (οἱ νεώτεροι), which is an implicit way of referring to Arabs. It may be noted that Seth uses a specific term for « the Arabs » only once, in the preface: Ἀγαρηνῶν. ⁴³

On the other hand, the only occurrence of a singular name for an oriental author is significant because it is possible to identify this author. This is in the chapter on ducks (περὶ νησῶν), at the end of which Seth quotes « a Persian », after which one must certainly recognise al-Rāzī:

Ὁ δὲ Πέρσης φησὶ μὴ εἶναι ἔτερον στέαρ ἢ λεπτομερέστερον ἢ διαφορητικώτερον ἢ μαλακτικώτερον.

The Persian says that there no finer, more discutient or more emollient fat. ⁴⁴

As Brian Long rightly points out, this corresponds to a passage in al-Rāzī's *Kitāb al-hāwī fī l-ṭibb* (in Latin: *Liber continens*), in the chapter on the duck (بط) where al-Rāzī, after listing the opinions of other doctors on its fat, gives his own opinion on it:

To me: I have not seen a finer fat, nor one that softens or dissolves more strongly than it. ⁴⁵

⁴² « Κόνστανς ὁ λεγόμενος Ῥωμαῖος » (ed. Langkavel, p. 83 l. 20, chap. περὶ παγούρων). He might be identified with Qusta ibn Luqa, according to a suggestion by Thibault Miguët, whom I thank.

⁴³ Ed. LANGKAVEL, p. 1, l. 2. Brian Long records a second occurrence (see the section by Brian Long on « Symeon Seth » in DIMITRI GUTAS, ANTHONY KALDELLIS, BRIAN LONG, « Intellectual Exchanges with the Arab World », in ANTHONY KALDELLIS, NIKETAS SINOSSOGLU (eds.), *The Cambridge Intellectual History of Byzantium*, Cambridge University Press, Cambridge 2017, p. 79–98, here p. 95) but it is actually in the chapter on cannabis (κάναβος, ed. LANGKAVEL p. 61, l. 5: ἐν γὰρ τοῖς Ἀράβοις « among the Arabs »), which is most likely inauthentic (see *supra* n. 41).

⁴⁴ Ed. LANGKAVEL, p. 72, l. 8–10. Translations are mine (unless otherwise stated).

⁴⁵ AL-RĀZĪ, *Kitāb al-hāwī fī l-ṭibb*, book 20, letter bā', chap. 2, ed. Abū Bakr Muḥammad b. Zakariyā al-Rāzī, *Kitāb al-hāwī fī al-ṭibb*, 8 vol., Beyrouth 2000 [original ed.: Hyderabad-Deccan, 1955–1970] p. 132–3, chap. 150, here p. 133 l. 6; see GUTAS, KALDELLIS, LONG, « Intellectual Exchanges with the Arab World », p. 96 and fn. 74, where it is merely mentioned, without quoting the texts.

The only (minor) difference concerns word order, since the end of al-Rāzī's sentence should be rendered as μαλτικώτερον ἢ διαφορητικώτερον, but this is most likely an error in the manuscript tradition, in Arabic or in Greek: in any case, it is an unquestionable coincidence. However, this situation is exceptional and Seth does not mention any other Eastern author by name.

Now, when searching for 'Arabic' elements at a more precise level in Seth's work, one encounters a methodological difficulty, as Arab authors of pharmacology and dietetics were largely inspired by Dioscorides and Galen. Consequently, whenever we find a connection between Seth and a particular Arab author, we cannot rule out the possibility that this connection is due to the fact that they both go back to the same Greek source. It is therefore necessary to select from Seth's treatise those elements that are absent from classical Greek pharmacology. These fall into two categories:

- (1) for the chapters discussed by Galen and Dioscorides (this is the great majority), these are the aspects of Seth's text that do not occur in either of these two authors (this is the case, for example, for the passage on duck fat, just considered);
- (2) For products not discussed by Galen nor Dioscorides, the oriental origin of the whole chapter is almost certain.

And indeed, for this second type of chapter, research gives valuable insights, although the situation is rather complex.

Actually, in Seth's treatise the word « foodstuff » should be taken in a broad sense, as there are many products that are not edible, such as flowers, perfumes, ointments, scented oils and, in small numbers, products made from different ingredients, for example *zulep* (rose water syrup) or *net* (scented lozenge): most of them are of Oriental origin. The chapters that Seth devotes to these exotic products are of interest since they have no equivalent in classical Greek pharmacology, because these products were unknown to Galen and Dioscorides. Instead, all offer clear parallels to chapters on the same subjects written by several Arab doctors. Such is the case, for example, of the chapters dedicated to ambergris, camphor and jujube, for which very promising parallels – but no exact equivalent – can be found in works by Ibn Māsawayh (777–857), Avicenna (Ibn Sīnā, 980–1037), al-Bīrūnī (al-Bīrūnī, c. 973–1050), al-Rāzī (854–924) but also the geographer al-Qazwīnī (1203–1283), who thus drew on one or more common sources with Seth.⁴⁶ To exemplify this view, one might consider Seth's chapter on cloves:

⁴⁶ For a detailed analysis, see: CRONIER, « Influences arabes »; see also EAD., « Le traité *Sur les aliments* de Syméon Seth, entre tradition et modernité », in ISABEL GRIMM-STADELMANN, FREDERICK LAURITZEN (eds.), *Hospitals and Medicine from Constantinople to the Scuola Grande di San Marco in Venice. Proceedings of the conferences of 22nd November 2017 and 28th February 2019 at the Scuola Grande di San Marco, Venice*, De Gruyter Berlin (Byzantinisches Archiv, Series Medica) [forthcoming].

Τὸ καρύοφυλλον θερμὸν ἐστὶ καὶ ξηρὸν κατὰ τὴν δευτέραν ἀπόστασιν· τινὲς δὲ καὶ ἐν τῇ τρίτῃ αὐτὸ τεθείκασιν. Ἔστι δὲ δένδρου καρπός. Ὄφελει δὲ τὸν στόμαχον καὶ ἥπαρ καὶ τὴν καρδίαν, καταπαύει τε τὴν ἀπὸ ὑγρότητος ναυτίαν, βλάπτει δὲ τὰ ἔγκατα.

Clove is hot and dry in the second degree, but some place it in the third. It is the fruit of a tree. It is useful for the stomach, the liver and the heart; it stops nausea caused by dampness, but it is harmful to the intestines.⁴⁷

There is no chapter of this name either in Dioscorides or Galen. In Greek, only Paul of Aegina records it in his *Epitome medica*:

Καρύοφυλλον οὐ πρὸς τοῦνομα καὶ τὴν οὐσίαν ἔχει, ἀλλ' ἐκ τῆς Ἰνδίας οἶον ἄνθη τινὰ δένδρου καρφοειδῆ μέλανα, ὅσον δακτύλου σύνεγγυς τὸ μήκος, φέρεται ἀρωματίζοντα καὶ δριμύα, ὑπόπικρα, θερμά τε καὶ ξηρὰ περί που τρίτης τάξεως· ἂ πολὺχρηστά ἐστὶν ἐν ὄψοις τε καὶ ἐτέροις φαρμάκοις.

Clove (*karyophyllon*, litt. leaf-nut) has not the nature corresponding to its name: on the contrary, they are, coming from India, a kind of flower of a tree resembling dry sticks, black, about the width of a finger. They are said to be fragrant, pungent, somewhat bitter, hot, and dry to the third grade approximately. They are very useful for sight and other medicines.⁴⁸

It is easy to see that Paul is not the source of Simeon Seth. On the other hand, there are clearer similarities with the chapters of Arab authors.⁴⁹ For example, al-Rāzī states in his *Kitāb al-ḥāwī*:

Qaranful (قرنفل).

Paul: It is hot and dry to the second degree.

Ḥakīm ibn Ḥunayn: The moderns classify it in the third degree for heat and dryness and they use it to prepare medicines that sharpen the sight, make the obscuration (of the sight) go away and cure the discharges.⁵⁰

⁴⁷ Ed. LANGKAVEL, p. 56, l. 1–6.

⁴⁸ PAUL OF AEGINA, *Epitome medica*, VII, 3, 10.

⁴⁹ A list of Arabic entries on *qaranful* can be found in ALBERT DIETRICH, *Dioscorides triumphans. Ein anonymer arabischer Kommentar (Ender 12. Jahrh. N. Chr.) zur Materia medica. Arabischer Text nebst kommentierter deutscher Übersetzung. 2. Teil: Übersetzung und Kommentar*, Vandenhoeck & Ruprecht, Göttingen 1988, p. 394 n. 7.

⁵⁰ Ed. AL-RĀZĪ, *Kitāb al-ḥāwī fī l-ṭibb*, vol. XXI, letter *qāf*, p. 302, chap. 662. In the remaining part of the chapter al-Rāzī refers to the gum of this tree.

Interestingly, al-Rāzī offers the same alternative as Seth for the question of second or third degree, but al-Rāzī is more specific in naming the authors who provided this information. For the rest, however, al-Rāzī does not mention the same therapeutic properties as Seth. Thus, even if one quotation that could have come directly from al-Rāzī was discussed above, and even if some punctual similarities have been pointed out,⁵¹ a more in-depth analysis of the whole treatise, in particular of its 'exotic' chapters, shows that it cannot originate from al-Rāzī, at least not exclusively. For his part, Ibn Buṭlān cannot be Seth's source for this particular chapter either, as he does not devote a notice to cloves. On the other hand, Avicenna says this in his *Canon*:

It is a plant from China: the clove is the fruit of this plant. It is similar to jasmine but blacker. The male is like the stone of an olive but more elongated and more intensely black. Its resin has properties similar to those of terebinth resin. The best is that which is similar to a stone, dry, sweet, with a pleasant smell. It is warm and dry to the third degree. It gives pleasant breath. It makes the sight sharp. It acts against obscuration (of sight). It strengthens the stomach. It is useful against vomiting and nausea.⁵²

There are striking similarities here: like Seth, Avicenna states that it is the fruit of a tree, that it strengthens the stomach and that it is useful against nausea. However, Avicenna does not mention its benefit to the liver and to the heart, nor the fact that nausea is caused by excess moisture. Despite the comparisons, Avicenna cannot be the source of Seth, at least not the unique source.

In a third author, finally, one can find other material present in Seth but absent in Avicenna and al-Rāzī. Ibn Māsawayh states in his treatise *On Simple Aromatic Substances*:

Clove. One kind. Its best is arid, dry with a sweet, good odour. It is the fruit of a tree which comes from Sofala. It is introduced into liquid aromatics for women and into the cooking of nutmeg. It is hot, gentle, good for the stomach and fainting, a vomiting condition caused by the damp humour, and for some of the liver ailments that entail putrefaction and the damp humour.⁵³

⁵¹ E.g. the chapter on melons, *περὶ τετραγγοῦρων*, in which PINZÓN AVEDAÑO, « Interacciones », p. 44–5, identifies some similarities with al-Rāzī: they are rather slight and show that al-Rāzī is not Seth's source (or at least not his only source).

⁵² Edition of the Arabic text: *Libri quinque Canonis medicinae Abu Ali principis filii Sinae alias corrupte Avicennae [...] Arabice nun primum impressi*, in *Typographia Medicea, Romae 1593*, p. 243.

⁵³ English translation: MARTIN LEVEY, « Ibn Māsawayh and His Treatise on Simple Aromatic Substances: Studies in the History of Arabic Pharmacology I », *Journal of the History of Medicine and Allied Sciences*, 16/4 (1961), p. 394–410, here p. 403.

Here we find some aspects that are found in Avicenna and Seth: it is the fruit of a tree, it is hot (al-Rāzī also says so) and it is good for the stomach. But Ibn Māsawayh is the only one to say, like Seth, that vomiting (nausea in Seth) is due to excess of humour and that cloves are good for the liver.

Further research will perhaps reveal an Arabic source for other elements mentioned by Seth, such as cloves being good for the heart but harmful to the intestines. In any case, it thus appears that Seth's text includes material found in some cases in al-Rāzī, in others in Avicenna, and in still others in Ibn Māsawayh, but that none of these authors can be the sole source of Seth. This observation applies to all the chapters considered so far.

In sum, it emerges that the treatise *On the Properties of Foodstuffs* is based on one or more Arabic sources, but we have not yet found a direct model of which it could be a translation. In particular, contrary to what one might have expected, it has not been possible to establish a strong relationship with Ibn Buṭlān's *Taqwīm al-Ṣiḥḥa*, although it is certain that Symeon Seth read this treatise, of which he even made a partial translation, as mentioned above and will be discussed below. In general, strong connections can be made with different Arab authors but not with a unique author. Perhaps Seth had translated an Arabic work that has not been preserved until now or perhaps further research will yield new results.⁵⁴ But it is more likely that Seth drew on several sources, as he himself says in the prologue, taking his inspiration from many Arabic works which he would have more or less freely translated in Greek and adapted.

In any case, the treatise *On the Properties of Foodstuffs* is definitely very deeply inspired by Arabic science and, as our research progresses, the proportion of its Greek sources is gradually diminishing. Although it is not a mere translation of an Arabic work, it can be considered as an adaptation into Greek of several Arabic sources. It is now worth examining the reasons why Seth does not refer by name to the Arab authors on which he relies.

III.3. Why doesn't Seth cite his Arabic sources by name?

This question has been raised several times in the recent literature. In a subtle way, Brian Long suggested religious concerns, as well as the assumption that Seth was seeking respectability among the Constantinopolitan elite, a context in which it was unwise to openly criticise Greek authors by supporting the Arabs.⁵⁵ But

⁵⁴ In addition to methodological challenges, the identification of Seth's Arabic sources is made more difficult by the fact that many Arabic medical and dietetic treatises have not been critically edited or even published in any way.

⁵⁵ See GUTAS, KALDELLIS, LONG, « Intellectual Exchanges with the Arab World », p. 96 and 98; see also part IV of the present paper.

there are still other explanations, at least in the specific case of the treatise *On the Properties of Foodstuffs*.

First of all, it must be stressed that Seth's silence on his sources in the treatise *On the Properties of Foodstuffs* does not only apply to the Arabs, but also to the Greeks. Thus, as mentioned above, Seth relies heavily on Dioscorides and Galen but almost never quotes them explicitly. Actually, it should be pointed out that in the Greek medical tradition, it is usual to not explicitly cite one's sources, especially when one is writing a creative rather than an accumulative work. Indeed, in his treatise *On Medical Matter* Dioscorides explicitly mentions only in his preface the names of the authors from whom he draws; in the chapters themselves, he does so only very rarely. Similarly, Galen, in his *On Simple Medicines*, does exactly the same: although Dioscorides is his direct source, Galen only mentions him very rarely. In both cases, the authors are not simply compiling, but creating a new work. In our opinion, the same can be said of Seth when he wrote his work *On the Properties of Foodstuffs*.

Following the example of Galen and Dioscorides, Seth almost never indicates his sources, whether Greek or Arabic: at this level, he makes no distinction according to language. On the other hand, in the rather rare cases where Seth explicitly mentions his sources, there is undeniably a difference because, as we have seen, he mentions the names of certain Greek authors but never those of Eastern authors. As Brian Long rightly pointed out, this contrasts with certain treatises on astronomy or astrology, composed in the twelfth century, in which the names of Arab authors are expressly mentioned, often to correct Ptolemy's statements. One reason for this, to our mind, may lie in differences in the nature of the treatises and in the target audience. Astronomical treatises are highly technical and are written by and for specialists, who need precise data for their demonstration: it is then crucial to know who is at the origin of a given argument. This is not the case with *On the Properties of Foodstuffs*, which is not intended for specialists. The target audience is that of members of the Constantinopolitan upper class, definitely learned but not erudite, and the treatise is not a scholarly work:⁵⁶ the readers for whom Seth wrote his *On the Properties of Foodstuffs* were doubtless familiar with Hippocrates, Galen and Dioscorides, but not with al-Rāzī, Ibn Buṭlān, al-Bīrūnī or Avicenna, and they would not necessarily have been eager to learn about them.

It is unlikely that Seth was ashamed of his oriental sources or wished to minimise their value, for, on the contrary, he clearly claims them in his preface and even shows a certain pride in them. When he then quotes « the Persians » or « the Egyptians », etc. in a chapter, it is implicitly to prove them right. This 'Oriental' input is the distinctive feature by which he stands out from his

⁵⁶ We shall soon come back to this point.

forerunners and expects to be noticed; it was no doubt a way for him to attract the curiosity of the emperor, or at least of the Byzantine reader who was eager for exoticism. The fact that Seth translated *Kalila wa Dimna* at the emperor's request indicates that there was a certain demand for knowledge or culture from the Arab world and the East in general in the imperial milieu – at least in such fields as literature or dietetics, where there are no (or hardly any) religious issues. This audience was curious to know what « the Persians » or « the Indians » said about this or that food, but did not care about the exact author from whom the information provided by Seth came. This may explain why Seth, on the one hand, boasts in his prologue of having called upon oriental texts and, on the other hand, never mentions the oriental authors by name.

It is certain that at that time 'exotic' products were widespread in the Byzantine capital, either in the form of foodstuffs or cosmetics in the broadest sense.⁵⁷ By granting them a place, Seth fills a gap in the dietetic literature available at the time, which came from classical antiquity and which mentioned products that had disappeared by the time of Seth and, on the other hand, which did not know about certain products that were nevertheless very present in the daily life of the eleventh-century Constantinople. With this book, Seth thus updated the knowledge of dietetics available at the time: its success testifies to the fact that it was well adapted to the public.

III.4. The treatise's reception in Byzantium

As we have seen, the title of the treatise in several (although not all) manuscripts indicate that it is dedicated to an emperor, Michael Doukas. Indeed, since Greek antiquity the genre *On Foodstuffs* is typical of treatises dedicated to a sovereign, often with the aim of helping him, through an appropriate diet, to maintain good health for as long as possible. In the middle of the tenth century, Theophanes Chrysobalantes dedicated his own work *On Foodstuffs* to the Byzantine emperor Constantine VII Porphyrogennetos – a work which Seth certainly thought of when he wrote his own treatise. Seth is likely to have written this work at the beginning of his Constantinopolitan career, whose *floruit*, as we have seen, can be placed a little later, during the reign of Alexios I Komnenos. This may suggest that the treatise *On the Properties of Foodstuffs* was a way for Seth to become known at the Byzantine court.

⁵⁷ See ANDREW DALBY, « Some Byzantine aromatics », in LESLIE BRUBAKER, KALLIRROE LINARDOU (eds.), *Eat, Drink, and Be Merry (Luke 12:19): Food and Wine in Byzantium. Papers of the 37th Annual Spring Symposium of Byzantine Studies, in Honour of Professor A. A. M. Bryer*, Ashgate, Aldershot–Burlington (Vt.) 2007 (Society for the Promotion of Byzantine studies. Publications, 13), p. 51–7; Id., *Tastes of Byzantium: the Cuisine of a Legendary Empire*, I. B. Tauris, London–New York 2010, p. 38–47 and 59–66.

When one compares Seth's treatise *On the Properties of Foodstuffs* with Galen's on the same subject, the difference in their nature is obvious: while Galen constantly provides medical explanations for the phenomena he mentions (why this food makes one vomit, why this one helps digestion etc.), Seth sets out the properties in a sober but clear and pleasant way. Seth clearly does not aim at being controversial, but rather he wishes to gather the best knowledge about a particular food. If there is a disagreement between several authors, he makes his own choice without comparing opinions. There are only very few polemics or direct attacks on an author and, in general, Seth does not interfere as an author and almost never uses the first person.⁵⁸ He does not pose as a medical authority, even though it is obvious that he himself has made selections from different medical authors, especially when they are of divergent opinion. Practically, Seth contradicts Galen on two occasions only: in the chapter *on pistachios* (περὶ πιστακίων) and *on red mullet* (περὶ τρίγλης). In the first case, he quotes a statement by the 'moderns' that contradicts Galen and, although he is not explicit about it, he apparently supports the 'moderns';⁵⁹ in the second case, he personally disagrees with him, but on a matter of taste, not on a medical issue (Galen thinks that small mullets are better than big ones, but Seth does not).⁶⁰ In most cases, Seth cites Galen as a reliable authority: this attitude is typical of Arab authors in general, who base themselves on Galen, but occasionally venture to criticise him.

⁵⁸ There are a few exceptions but Langkavel's text needs caution, as previously stated. E.g. Περὶ καρύων, *On nuts*: (...) κατακόρως δὲ χρώμενα ἐκβάλλειν εἶδομεν τὰς ἔλμινθας (ed. LANGKAVEL, p. 49, l. 22), « we have observed that [nuts] eaten in abundance expel intestinal worms », but the *apparatus criticus* shows that several manuscripts read κατακόρως δὲ χρώμενα ἐκβάλλει τὰς ἔλμινθας, « [nuts] eaten in abundance expel intestinal worms », without the first person.

⁵⁹ Περὶ πιστακίων, *On pistachios*: Στομάχῳ δὲ κατὰ τὸν Γαληνὸν οὔτε βλάβην οὔτ' ὠφέλειαν ἐμποιοῦσιν ἀξιόλογον· οἱ δὲ νεώτεροι εὐστόμαχα ταῦτα νομίζονται (ed. LANGKAVEL, p. 87, l. 10-12), « According to Galen they [the pistachios] have no harmful or beneficial effect on the stomach worth mentioning. On the contrary, the moderns consider that they are beneficial for the stomach » (cf. GAL., *De alim.*, VI.612, 16-17 K.: στομάχῳ δ' οὔτ' ὠφέλειαν οὔτε βλάβην ἀξιόλογον ἐξ αὐτῶν ἔχω μαρτυρεῖν, « On the stomach, I have no useful or harmful effects worth mentioning about them »).

⁶⁰ Chapter περὶ τρίγλης, *On red mullet*: ed. Langkavel, p. 106 l. 15-19: Θαυμάζω δὲ τὸν Γαληνὸν θαυμάζοντα τοὺς τὰς μεγάλας τρίγλας ὠνουμένους, ὡς τῶν μικρῶν ἡδυτέραν ἐχούσας τὴν σάρκα καὶ εὐπεπτότεραν. Εὐπεπτότεροι μὲν γὰρ αἱ μικρότεροι ἀληθῶς, ἡδυτέροι δ' οὐδαμῶς, « I don't understand Galen, who doesn't understand people who buy the big red mullets, thinking that they have better and more digestible meat than the small ones. In truth, the small ones are indeed more digestible, but certainly not better » (cf. GAL., *De alim.*, VI. 717, 2-4: Οὐ μὴν οὐδὲ διὰ τί τὰς μεγίστας τρίγλας ὠνοῦνται πάμπολλοι, δύναμαι γνῶναι, μήθ' ἡδεῖαν ὁμοίως ταῖς μικρότεραις ἐχούσας τὴν σάρκα μήτ' εὐπεπτον, ὡς ἂν ἰκανῶς σκληρὰν ὑπάρχουσαν, « But I can not understand why so many people buy the very large red mullet, since their flesh is neither as good nor as digestible as that of the small ones, and it is even quite tough »).

Moreover, there is a strong desire on Seth's part to get his audience to understand him: this manifests itself, among other things, in the use of the common name for a food rather than its classic name, as he himself states in his preface.⁶¹ For instance, Seth refers to cucumbers as ἀγγούρια, pointing out that they used to be called σικύα, which is indeed the name given to them by both Galen and Dioscorides.⁶² The vocabulary is explicitly that of everyday life – the cultivated elite's everyday life, of course. In general, the treatise is not only devoid of technical considerations but contains very little specialised medical vocabulary, which makes it relatively easy to read. Thus, it could reach, apart from the emperor himself, a fairly wide audience among the Byzantine elite. In sum, it deals with familiar things (for what could be more familiar than food?), with a little touch of exoticism, which allowed it to stand out from previous works on the same subject. Clearly, Seth's audience was eager for 'Oriental' texts, but not to the extent of scholarship.

All these facts may explain the treatise's rapid and wide circulation. Actually, fine manuscripts containing this text, which would come to be considered a literary work among some people, can be found as early as the twelfth century⁶³ or the beginning of the thirteenth.⁶⁴ Most likely, therefore, the target audience was not primarily doctors or physicians, but rather a cultivated elite close to the emperor and, more broadly, a literate but non-specialist Byzantine audience. However, it is certain that the work was also circulating in medical circles: in the fourteenth century, it was copied in the same manuscripts and by the same copyists as Galen, Hippocrates and other classical physicians.⁶⁵ To sum up, the treatise *On the Properties of Foodstuffs* is likely to be the work through which Arabic medical knowledge most deeply and widely penetrated the Byzantine world, allowing it to become perfectly assimilated.

⁶¹ Ἐπεὶ δὲ τινὰς τῶν τροφῶν ἄλλως μὲν ἢ κοινῇ ὀνομάζει συνήθεια, ἄλλως δὲ ἢ τῶν παλαιῶν ἰατρῶν, τοῖς κοινοτέροις καὶ γνωριμωτέροις τῶν ὀνομάτων χρῆσθαι διὰ τὸ πᾶσι δῆλα τυγχάνειν (ed. LANGKAVEL, p. 1, l. 11–5), « On the other hand, as some foods bear different names in common usage and among ancient physicians, I will use the most common and well-known names, in order to be understood by all ».

⁶² Τὰ ἀγγούρια, ἃ πρὶν καὶ σικύα ἐλέγοντο. (ed. LANGKAVEL, p. 21, l. 21–2), « The cucumbers (*aggouria*) which were formerly called *sikya* ».

⁶³ E.g. Paris, BNF, supplément grec 634 (diktyon: 53369), fol. 217r–254v.

⁶⁴ E.g. Paris, BNF, gr. 2231 (diktyon: 51860), fol. 1r–42v.

⁶⁵ E.g. Vaticano, BAV, Vatic. gr. 297 (diktyon: 69768), fol. 144v–187v.

IV. The translation of the ‘*Taqwīm al-Ṣiḥḥa*’: a hidden tribute to Ibn Buṭlān

Together with Alessia Guardasole, we have edited, translated and commented on a curious short text attributed to Seth, which will be published soon.⁶⁶ This text is a patchwork of excerpts from Ibn Buṭlān’s *Taqwīm al-Ṣiḥḥah bi-l-asbāb al-sittah* (« Maintenance of Health by the Six Causes ») and its Greek title is Συμεῶν μαγίστρου καὶ φιλοσόφου τοῦ Σηθ περὶ ὑγιεινῆς πραγματείας τῆς διὰ τῆς ἕξ αἰτιῶν συμμετρίας (« Symeon Seth, *magistros* and philosopher, *On the Handbook of Health by the Balance of the Six Causes* »). This short text is preserved in three manuscripts.⁶⁷ Its limited circulation and its style suggest that it is a hypomnematic text, i.e. not intended for publication, but reserved for private use. Seth would have translated certain passages of the *Taqwīm al-Ṣiḥḥa* for himself and for his own research. He selected only excerpts from the preface and from the first four canons, that were found in the margins of the synoptic tables of Ibn Buṭlān’s treatise.

This impression of an unfinished text or draft for private use is reinforced by the fact that the translation is not literal and faithful, but elliptical. Seth deletes many passages, simplifies, and rewrites his source. The excerpts he chooses to translate show his interest in the theoretical content of the Arabic treatise. He gathers data on the six necessary causes – which became the « *sex res non naturales* » in the Western medical tradition – or on the theory of the eight tastes and its pharmacological application to determine the degrees of intensity of the drugs. Ibn Buṭlān’s text refers to the discoveries of Arab physicians and philosophers and illustrates the Arabic Galenism that developed in the Islamic world from the ninth century onwards. Seth also translated a passage from the Baghdadi physician that associates the four phases of the moon and the classification of substances into four categories (food, functional food, drug, and poison) in an astro-medical theory. He also refers to a debate between Aristotelian

⁶⁶ In CRONIER, GUARDASOLE, PIETROBELLI (eds.), *De Bagdad à Constantinople: le transfert des savoirs médicaux (XI^e-XV^e s.)* [forthcoming]. On this texte, see ANTOINE PIETROBELLI, « Une traduction grecque inédite du *Tacuinum sanitatis* d’Ibn Buṭlān: vers d’autres *translationes studiorum* », *Horizons maghrébins*, 79 (2018), p. 240–252; ID., « Des aliments aux éléments: la température du goût chez Seth et Galien », in Isabel GRIMM-STADELMANN, Frederick LAURITZEN (eds.), *Hospitals and Medicine from Constantinople to the Scuola Grande di San Marco in Venice. Proceedings of the Conferences of 22nd November 2017 and 28th February 2019 at the Scuola Grande di San Marco, Venice*, De Gruyter, Berlin (Byzantinisches Archiv, Series Medica) [forthcoming]; and ID., « Une nouvelle traduction arabo-grecque de Syméon Seth: *Sur le manuel de santé d’après l’équilibre des six causes* », in MARIE CRONIER, ALESSIA GUARDASOLE, ANTOINE PIETROBELLI (eds.), *De Bagdad à Constantinople: le transfert des savoirs médicaux (XI^e-XV^e s.)*, Orient & Méditerranée, Paris [forthcoming].

⁶⁷ Bologna, Biblioteca Universitaria, 3636, fol. 122r–125r (diktyon: 9764); Venice, Biblioteca Nazionale Marciana, Marc. gr. Z. 297, fol. 199r–v (diktyon: 69768); Oxford, Bodleian Library, Barocci 224 (diktyon: 47512). Another manuscript transmits only the title: Vienna, Österreichische Nationalbibliothek, med. gr. 45, fol. 103v (diktyon: 71070).

philosophers and Galenic physicians on the determination of the four qualities (hot, cold, dry, and wet) of animals and plants. But, more than for its content, this text is relevant as an Arabo-Greek translation and an important historical document.

Ibn Buṭlān is never mentioned in the Greek text, neither in the title nor in the main body. Such an omission can be linked to Seth's secrecy about his Arabic sources in the *On the Properties of Foodstuffs*. Seth's medical production is indeed particularly difficult to study because he does not mention his sources, and they are mostly Arabic. In a contribution on Symeon Seth, Brian Long⁶⁸ has explained his reticence to cite al-Rāzī's influence in the *Refutation of Galen* or to quote his Arabic sources in his dietary treatise as a sign of « religious anxiety ». Long writes: « religious anxiety likely underlay some of Seth's reluctance to openly make use of Arabic sources ».⁶⁹ Indeed, it seems that it was not necessarily a good idea to display one's Arabic knowledge produced by the Muslim neighbors in Constantinople in the second half of the eleventh century, but, as we have seen, other reasons related to the genre and the audience of the dietary treatise have prevailed for this omission of the Arabic sources. In the case of the translation of the *Taqwīm*, other interpretations that involve the Byzantine intellectual climate can be adduced. The translation of the *Taqwīm al-Ṣiḥḥa* is evasive about its Arabic model, but together with the *Refutation of Galen*, it establishes a double link between Seth and Ibn Buṭlān. And paradoxically, Seth never mentioned his debt to the physician of Baghdad in his medical treatises.

To explain this silence, we could return to Michael Psellos. Several scholars⁷⁰ have suggested that the Byzantine philosopher had met Ibn Buṭlān when he stayed in Constantinople to assist the Patriarch Michael Keroullarios. In a letter addressed to Keroullarios and dated after 1054, Psellos boasts of his radiant teaching, saying that he attracts students from all over the world⁷¹. He indicates that one of them

⁶⁸ See the section by Brian Long on « Symeon Seth », in GUTAS, KALDELLIS, LONG, « Intellectual Exchanges », p. 92–98. Long attributes the translation of al-Rāzī's *De pestis* to Seth without any proofs.

⁶⁹ GUTAS, KALDELLIS, LONG, « Intellectual Exchanges », p. 96.

⁷⁰ For example, CHEYNET, « Michel Psellos et Antioche », p. 415 and SYPIANSKI, « Ibn Buṭlān et Syméon Seth ».

⁷¹ MICHAEL PSELLOS, *Letters*, 111, l. 88–96, ed. STRATIS PAPAIOANNOU, *Michel Psellos. Epistulae*, De Gruyter, Berlin 2019, vol. I, p. 244: Ἀλλὰ Κελτοὺς μὲν καὶ Ἄρραβας ἀλωσίμους ἡμῖν πεποιήκαμεν καὶ καταπεφοιτήκασι κατὰ κλέος ἡμέτερον κακ τῆς ἐτέρας ἡπείρου. Καὶ ὁ μὲν Νεῖλος τὴν γῆν ἐπάρδει τοῖς Αἰγυπτίοις, ἡ δὲ ἐμὴ γλῶττα τὴν ἐκείνων ψυχὴν· κὰν πύθοιο τῶν Περσῶν, κὰν τῶν Αἰθιοπῶν, ἐροῦσιν ὡς ἴσασί με καὶ τεθαυμάκασι καὶ τεθήρανται. Καὶ νῦν δέ τις ἐκ τῶν Βαβυλωνῶν ὀρίων ὥστε πιεῖν τῶν ἐμῶν ναμάτων ἀσκέτοις ταῖς προθυμίαις ἐλήλυθε, καὶ τὸ μὲν τῶν ἐθνῶν « λύχρον σοφίας » καλεῖ, « τὸ δὲ φωστῆρα » προσονομάζει· καὶ ἄλλοι ἄλλως με τοῖς καλλίστοις ὀνόμασι διηρήκασι (« But I have made Celts and Arabs yield to me, and on

recently arrived from Babylon (καὶ νῦν δέ τις ἐκ τῶν Βαβυλῶνος) and Jakub Sypianski⁷² has proposed to identify this Babylonian as Ibn Buṭlān. Another passage may allude to Ibn Buṭlān: in his *Accusation against Keroullarios*, completed in 1058, just before the Patriarch's death (January 1059), Psellos criticizes the snobbery of the Constantinopolitan people, who set great store in foreign scholars, even if they were quacks. He describes all sorts of people at the Patriarch's palace:

Ἄστρολόγοι δὴ τινες ἐπὶ τούτοις καὶ μάντεις, τῶν οὐδὲν μὲν εἰδόντων [...], πιστευομένων δὲ ἄλλως οὐκ ἀπὸ τέχνης, ἀλλ' ἀπὸ τοῦ ἔθνους, ὅτι ὁ μὲν Ἰλλυριός, ὁ δὲ Πέρσης.

Some astrologers, and moreover, some diviners among those who don't know anything [...], trusted not for their art, but for their nationality, because one is Illyrian and the other Persian.⁷³

The Persian astrologer in Keroullarios's entourage could also be Ibn Buṭlān, who was skilled in astrology. Ibn Abī Uṣaybi'a cites a passage by Ibn Buṭlān that relates the smallpox epidemic in Constantinople to the stellar phenomenon of the supernova SN 1054.⁷⁴ His *Taqwīm* borrows its tabular presentation from the *zij* (pl. *aziyāj*) or Arabic astronomical tables, and the astro-medical theory that is given in the preface explains the many references to astrology that are given in the margin of his tables.⁷⁵ Since the figure of the Arab mathematician and astronomer Abū

account of my fame they regularly come down here to study even from the other continent, and while the Nile irrigates the land of the Egyptians, my speech irrigates their souls. And if you ask a Persian or an Ethiopian, they will say that they have known me and admired me and sought me out. And now someone from across the boundary of Babylon has come to drink from my springs through an insatiable desire of his. One of the nations calls me 'a lamp of wisdom', another gives me the name 'luminary', while others distinguish me in other ways, with the most beautiful names »; trans. KALDELLIS, POLEMIS, *Psellos and the Patriarchs*, p. 41–42).

⁷² SYPIANSKI, « Ibn Buṭlān et Syméon Seth ».

⁷³ MICHAEL PSELLOS, *Oratio 1* (ed. GEORGE T. DENNIS, *Michael Psellus. Orationes forenses et acta*, Teubner, Stuttgart–Leipzig 1984, p. 97, l. 2657–61). On this passage, see DAGRON, « Formes et fonctions », p. 237. For another of Psellos' negative judgments about astrology, see MICHAEL PSELLOS, *Chronographia* (ed. ÉMILE RENAULD, *Les Belles Lettres*, Paris 1926, I, 97–98): « I say this since I know this science, having studied it for a long time and having helped many astrologers in the understanding of planetary aspects, although I do not believe that human affairs are driven by the movements of the stars » (trans. by PAUL MAGDALINO, « Occult Science and Imperial Power in Byzantine History and Historiography [9th–12th Centuries] », in PAUL MAGDALINO, MARIA MAVROUDI [eds.], *The Occult Sciences in Byzantium*, La Pomme d'or, Geneva 2006, p. 119–162, here p. 136).

⁷⁴ See *supra* fn. 20.

⁷⁵ Ibn Buṭlān also reserves the left margin of his synoptic tables for specifically astrological information that are derived from the astrologers themselves. These thirty remarks relate mainly to the favourable or unfavourable time for the use of a product according to the horoscope; see HOSAM ELKHADEM, *Le Taqwīm al-Ṣiḥḥa (Tacuini Sanitatis) d'Ibn Buṭlān: un traité médical*

Mašar in the ninth century, astronomy had become the queen of sciences – and medicine a form of applied astronomy. Arab physicians and philosophers, such as al-Kindī, al-Rāzī, Ibn Buṭlān or his Egyptian enemy Ibn Riḍwān, unanimously considered that every natural body, whether plant or animal like the human body, was influenced by the stars. This combination of medicine and astronomy in Ibn Buṭlān's *Taqwīm* was one of the most characteristic features of Arabic medicine. Psellos could have been referring to Ibn Buṭlān,⁷⁶ as one of the astrologers who gravitated to Keroullarios's circle.

This shift from a laudatory judgement on Ibn Buṭlān in the letter to Keroullarios to a form of rejection in the *Accusation against Keroullarios* could be explained by his change of attitude towards the patriarch. Psellos may have praised Keroullarios in the funeral oration he composed for him and have considered him as a friend, since Keroullarios's two nephews, Nikephoros and Konstantinos, were attending his own classes in the mid-1040s.⁷⁷ But he lashed out violently at him after the Schism and composed an indictment against the patriarch in 1058, when he was deposed by Emperor Isaac I Komnenos.⁷⁸ In his condemnation of foreign scholars, Psellos expresses a form of xenophobia⁷⁹ and a sense of superiority. This Hellenocentrism manifests itself in the choice of the ethnic terms « Babylonian » and « Persian » to refer to Baghdad and the Abbasid Caliphate. When Anna Komnene speaks of an Alexandrian astrologer, a colleague of Seth, she designates someone from Fustat or Cairo. This use of ancient Greek terms and realities to speak about their current neighbours denotes a form of chauvinism by reactivating their old barbarian connotations.

When Symeon Seth arrived in Constantinople, probably under the rule of Michael VII Doukas, Psellos had retired from politics, but he was still a central figure in intellectual life. Beside a « religious anxiety », we could explain Seth's reluctance to quote his Arabic sources and Ibn Buṭlān, as a cautious attitude: neither proclamations of exotic knowledge nor close links with the Baghdadi Ibn Buṭlān might have been particularly welcome in Constantinople.

But it was mainly Seth's scientific profile that was problematic for the Byzantines. Obviously, Seth's first production – his *Refutation of Galen*, his dietary

du XI^e siècle. *Histoire du texte, édition critique, traduction, commentaire*, Peeters, Louvain 1990, p. 282–286.

⁷⁶ However, there was also another Persian astrologer in Constantinople at that time: a certain Sergios, of Persian extraction, created a Byzantine astrolabe in 1062, today preserved in Brescia.

⁷⁷ MICHAEL PSELLOS, *Funeral Oration for the Most Blessed Patriarch Kyr Michael Keroullarios*, p. 41, ed. POLEMIS, *Michel Psellus. Orationes funebres*, De Gruyter, Berlin 2014, vol. I, p. 48, l. 47–50.

⁷⁸ On this ambivalent relationship, see KALDELLIS, POLEMIS, *Psellos and the Patriarchs*, p. 11–22.

⁷⁹ On this cultural xenophobia, see MAGDALINO, « The Porphyrogenita and the Astrologers », p. 26–28.

treatise *On the Properties of Foodstuffs* or his translation of the *Taqwīm al-Ṣiḥḥa* –⁸⁰ was of medical orientation. At the time of Seth's arrival in Constantinople, however, this profession had not yet acquired the respectability it would attain in the following generation.⁸¹ The reign of Alexios I Komnenos marked a turning point in the social recognition of the physician at the Byzantine court. While Seth seems to have occupied a position of astrologer at Alexios I's court, the status of this discipline was also ambiguous. Anna Komnene attributes an ambivalent attitude to her father, ranging from implicit recognition of astrology to a clear denial that can be traced back to Psellos himself.⁸² The intellectual profile of Symeon Seth, who inherited the training of the Baghdadi schools, was therefore still difficult to accept in the Byzantine cultural landscape, and this probably explains why he was always moving forward in a hidden manner.

We could also find other motives for Seth's silence (his personal nature, a broken relationship with Ibn Buṭlān, a personal method?), but the wider context makes Seth's silence more eloquent. If Symeon Seth could use Ibn Buṭlān's medical books, one can assert that he obtained them in Antioch during his youth, and that he met the Baghdadi physician in person. His medical, philosophical, and astrological knowledge seems to bear the stamp of Ibn Buṭlān's education, and such a transmission implies several years of attendance, even though Seth must also have been taught by other masters in Antioch.

If accepted, this link between Seth and Ibn Buṭlān allows us to better define his intellectual pedigree by reassembling the chain which connects our Byzantine translator to the masters of Baghdad. For this reconstruction, our information derives mostly from Ibn Abī Uṣaybi'a's *History of Physicians*. Soon after leaving Constantinople in 1058, maybe when Keroullarios was forced into exile on Imbros Island, Ibn Buṭlān was present at the deathbed of the famous blind poet Abū al-'Alā' al Ma'arrī in Ma'arrat al-Nu'mān, a city near Antioch.⁸³ This blind poet has been the teacher of 'Abdallāh ibn al-Faḍl al-Antākī, the notorious Antiochene translator of Greek patristic texts into Arabic.⁸⁴

⁸⁰ The translation predates his *Synopsis of Physics* since the theory of the eight tastes is influenced by Ibn Buṭlān's one, see ANTOINE PIETROBELLI, « Une nouvelle traduction arabo-grecque » [forthcoming].

⁸¹ See ALEXANDER KAZHDAN, « The Image of the Medical Doctors in Byzantine Literature of the Tenth to Twelfth Centuries », *Dumbarton Oaks Papers*, 38 (1984), p. 43–51 and PAUL MAGDALINO, *The Empire of Manuel I Komnenos, 1143–1180*, Cambridge University Press, Cambridge 1993, p. 361–366.

⁸² See MAGDALINO, « The Porphyrogenita and the Astrologers », p. 23–28 and ID., « Occult sciences », p. 142.

⁸³ See PIETER SMOOR, s. v. « al-Ma'arrī », *Encyclopédie de l'Islam*, t. V, Brill, Leiden, 1986, p. 932–939, spec. p. 935. This episode is reported by AL-QIṬĪ in *Ta'rif*, 65.

⁸⁴ See SAMUEL NOBLE, ALEXANDER TREIGER, « Christian Arabic Theology in Byzantine Antioch. 'Abdallāh ibn al-Faḍl al-Antākī and his Discourse on the Holy Trinity », *Le Muséon*, 124/3–4 (2011), p. 371–

Ibn Buṭlān and Ibn al-Faḍl must have known each other, since both have studied under the same master in Baghdad: the Nestorian monk Abū al-Faraj Ibn al-Ṭayyib, also called Ibn Baks (d. 1043), who was a native from Antioch.⁸⁵ Like Ibn Buṭlān, Ibn al-Ṭayyib was a theologian, a philosopher, and a physician. Like Seth and his master, he was a Galenic doctor and an Aristotelian philosopher since he was commenting on both authorities in Baghdad. He was practicing at the famous ‘Aḍudī hospital, like his own master, Ibn al-Khammār⁸⁶ (b. 942), a Baghdadi master with the same profile: a Christian philosopher, physician and theologian, but also a prolific translator from Syriac to Arabic. Ibn al-Khammār’s teacher was Yahyā ibn ‘Adī⁸⁷ (893–974), who translated numerous works of Greek philosophy, mostly from Syriac into Arabic.

In Antioch and through Ibn Buṭlān – among others –, Symeon Seth inherited the scholarly tradition of the Baghdadi Christian masters, who practiced medicine, philosophy, and translations. He imported this Arabic cultural background into Greek scholarship in a diffuse and discrete way, without naming his alien sources. He appears at the end of an Arabic chain and as the beginning of a new form of Galenism and Humanism in Byzantine culture.⁸⁸ The differentiated reception of his three medical treatises has enabled us to better understand the sophistication of his use of Arabic sources and the different ways in which he contributed to Byzantine medical science. We have distinguished between treatises of limited circulation or private use, such as his *Refutation of Galen* and his translation of the *Taqwīm*, and the treatise *On the Properties of Foodstuffs*, which benefited from an official edition and wide circulation that ensured Seth’s posterity as well as the diffusion of a Greek-Arabic medical science in Byzantium. If Symeon Seth tried to rediscover the old oriental solidarities of the Byzantine Empire, as Gilbert Dagron wrote, he also imported new learned practices from the East. He promoted in Byzantium a new figure of the polymath scientist who mastered philosophy, astronomy, and medicine, before this stature of the Byzantine scholar became a standard for later periods.

417, here p. 375–6. On Ibn al-Faḍl, see ROBERTS, *Reason and Revelation*. Alexandre Roberts points out (ibid., p. 14 and n. 54) Alexander Treiger’s hypothesis that Symeon Seth was one of Ibn al-Faḍl’s teachers: attractive as it is, this idea, which is based on a conjectural correction of an Arabic note, does not fit with our reconstruction of Seth’s biography, which, assuming that he was taught by Ibn Buṭlān in his youth in Antioch, thus in the early 1060s, would have him born around 1040–1045.

⁸⁵ See IBN ABĪ UṢAYBĪ ‘A, *History of the Physicians*, 10, 37; and CONRAD, « Ibn Buṭlān in Bilād al-Shām », p. 143 and 153.

⁸⁶ See IBN ABĪ UṢAYBĪ ‘A, *History of the Physicians*, 11, 8.

⁸⁷ See IBN ABĪ UṢAYBĪ ‘A, *History of the Physicians*, 10, 22.

⁸⁸ PAUL MAGDALINO, « From ‘Encyclopaedism’ to ‘Humanism’: the Turning Point of Basil II and the Millennium », in MARC D. LAUXTERMANN, MARC WHITTOW (eds.), *Byzantium in the Eleventh Century. Being in Between*, Routledge, London–New York, 2017, p. 3–18.

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