

Opportunities for Teaching and Studying Medicine in Medieval Portugal before the Foundation of the University of Lisbon (1290) (*)

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ABSTRACT

This paper discusses where Portuguese physicians studied medicine. The careers of two thirteenth-century physicians, Petrus Hispanus and Giles of Santarém, indicate that the Portuguese travelled abroad to study in Montpellier or Paris. But it is also possible that there were opportunities for study in Portugal itself. Particularly significant in this respect is the tradition of medical teaching associated with the Augustinian house of Santa Cruz in Coimbra and the reference to medical texts found in Coimbra archives. From these sources it can be shown that there was a suitable environment for medical study in medieval Portugal, encouraging able students to further their medical interests elsewhere.

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Medicine was not taught as a formal university subject in Portugal until 1290, with the foundation of a *Studium Generale* at Lisbon by King Dinis (1279-1325). Nevertheless, from the time of the creation of Portugal as a separate political entity at the end of the eleventh century, physicians can be found in witness lists and carrying out duties in the royal household (1). Where did these physicians gain their training? Were they forced to leave Portugal to study, and if so, where did they go? Were there any opportunities for medical study available to them within Portugal? The aim of this paper is to attempt to answer these questions by reviewing the evidence for the existence of an earlier Portuguese medical centre, the Augustinian house of Santa Cruz in Coimbra. The role this priory may have played in teaching medicine will be illustrated with reference to the careers of two thirteenth-century Portuguese physicians, Petrus Hispanus, usually identified with Pope John XXI (d.1277), and the less well-known Dominican friar, Giles of Santarém (d.1265). It will be seen that although Portugal was on the fringes of medieval Europe, it was not as isolated in the teaching and study of medicine as one might think.

Only a few historians have considered the training and studies of medieval Portuguese physicians, whether within or without Portugal. Generally, the focus of attention of historians such as L. M. de Rijk and J. M. da Cruz Pontes has been on the life and career of Petrus Hispanus.

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- (1) For example, Pedro Amarelo, Prior of the Collegiate church of Guimarães, was traditionally believed to have been the physician of Count Henry of Burgundy and his son, King Afonso Henriques, at the beginning of the twelfth century: see LEMOS, Maximiano. *História da Medicina em Portugal: doutrinas e instituições*, first published in 1899, reprinted in Lisboa, 2 vols., Manoel Gomez, 1991, vol. 1, p. 19. This has been challenged by MEYRA, João de. Se Pedro Amarello foi médico do Conde D. Henrique e de D. Afonso Henriques. *Archivos de História da Medicina Portuguesa*, 1911, 2, 157-164. Other examples are the physicians of Afonso III: Domingos das Antas (attested in 1255 and 1279), Bartolomeu (1261), Estêvão (1265) and Petrus (1268-1279): see VENTURA, Leontina. *A Nobreza de Corte de Afonso III*, 2 vols., Coimbra, Universidade do Coimbra dissertation, 1992, vol. 1, p. 140. The last, Petrus, used to be identified as Petrus Hispanus, but this has been shown not to have been the case: see FERREIRA, João. *O Papa João XXI e o Priorado de Santo André de Mafra, Studium Generale*, 1995, 1 (3-4), 359-364 (p. 369).

Usually, it is his career as pope or logician which is at issue, and his medical career has been neglected (2).

Another angle of research is based on the history of Portuguese educational and intellectual developments in general (3). The history of education in Portugal is important to a study of the teaching of medicine because, before the foundation of a university, it is against the background of monastic and cathedral schools that we need to place any evidence we have for medical study (4). We would expect to find formal teaching of some kind within such religious foundations, and it is also in these centres, with their libraries, *scriptoria*, cartularies, and books of obits, that we are able to find the necessary evidence. This

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- (2) There are very few recent studies of medieval Portuguese medicine, especially pre-fifteenth century. The work of LEMOS, note 1, has never been superseded. Numerous articles are devoted to various aspects of the life and career of Petrus Hispanus. Examples are RIJK, Lambert M. de. On the Life of Peter of Spain, the Author of the *Tractatus*, called afterwards *Summule logicales*. *Vivarium*, 1970, 8, 123-154; PONTES, José Maria da Cruz. Questões pendentes acerca de Pedro Hispano Portugalense (filósofo, médico e Papa João XXI). *In: Actas do Congresso Internacional do IX Centenário da dedicação da Sé de Braga*, 4 vols., Braga, Universidade Católica Portuguesa Cabido Metropolitano e Primacial, 1990, vol. 2, pp. 101-124; ANTUNES, José. O percurso e o pensamento político de Pedro Hispano, Arcebispo-eleito de Braga e Papa João XXI. *In: Ibid.*, pp. 125-184. None of these articles deal much with Petrus' medical career.
- (3) For education in Portugal see CAEIRO, Francisco da Gama. A organização do ensino em Portugal no período anterior à fundação da universidade. *Arquivos de História da Cultura Portuguesa*, 1968, 2, 3-23; SÁ, Artur Moreira de. Primórdios da cultura portuguesa. *Arquivos de História da Cultura Portuguesa*, 1968, 1, 53-93.
- (4) There were alternative ways of passing on medical knowledge in the Middle Ages; for example, from father to son, and through apprenticeship. There is evidence for the latter method being used in Portugal for surgical training in a group of fourteenth-century examination letters. However, it is a later period than the one under consideration. Furthermore, the focus of this article is on formal teaching practices within a classroom situation, which cannot be applied to an apprenticeship about which nothing certain is known: see AZEVEDO, Pedro de. Físicos e cirurgiões do tempo de Afonso IV. *Archivos de História da Medicina Portuguesa*, 1912, 3, 3-11. I would like to thank Michael McVaugh for a copy of this article. Further details of Portuguese surgical examinations can be found in GONÇALVES, Iria. Físicos e cirurgiões quatrocentistas—as cartas de exame. *In: Imagens do Mundo Medieval*, Lisboa, Livros Horizonte, 1988, [Horizonte historico 16], pp. 9-52.

research is somewhat artificial, as it is possible to find evidence only where there are surviving documents and in Portugal there is a distinct lack of documents. There are none of the notarial records, for example, which have proved so valuable to historians working in other areas of southern Europe, nor is there any personal correspondence (5). Portugal lagged behind in bureaucratic innovation, to some extent, and wars and earthquakes have taken their toll on what was produced.

Despite these problems, material relevant to the history of medicine has been discovered and published in unlikely places. For example, a number of extremely important documents—wills, booklists, obits, and fragmentary medical texts—were brought to our attention in the 1960s by Francisco da Gama Caeiro, in his research into the education of the thirteenth-century Franciscan saint, Anthony of Lisbon/Padua, and by António Cruz, in his doctoral thesis on the *scriptorium* of the Augustinian house of Santa Cruz in Coimbra. Although the medical information in these authors' works is incidental and scattered, all later researchers are indebted to them for their original work (6).

This study of medical teaching in medieval Portugal begins with an outline of what is known about the two best-known Portuguese physicians of the thirteenth century, Petrus Hispanus and Giles of Santarém, as regards their studies and training in medicine. Petrus Hispanus is the much better known figure, as a result of the belief that this author of a remarkably wide range of logical, theological and medical treatises

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- (5) The comparison here is mainly made with research that is being carried out in the archives of Aragon and southern France: see for example, McVAUGH, Michael R. *Medicine Before the Plague: Practitioners and their Patients in the Crown of Aragon, 1285-1435*, Cambridge, Cambridge University Press, 1993; SHATZMILLER, Joseph. *Jews, Medicine, and Medieval Society*, Berkeley, CA, University of California Press, 1994.
- (6) CRUZ, António. *Santa Cruz de Coimbra na Cultura Portuguesa da Idade Média*, Porto, Edições Marânus, 1964; CAEIRO, Francisco da Gama. *S. António de Lisboa*, Lisboa, University of Lisbon dissertation, 1967, vol. 1. Anthony (1190/95-1231), a contemporary of Petrus Hispanus and Giles of Santarém, who started out his career in Lisbon Cathedral as a boy, and then went on to study in S. Vicente and Santa Cruz, before becoming a Franciscan in 1220, makes a useful comparison with our physicians.

became Pope John XXI in 1276. The theory that there was only one Petrus Hispanus has been challenged from time to time, but it was only with the publication of two recent articles by José Francisco Meirinhos and Angel d'Ors that the challenge was made systematic (7). There is now considerable doubt that the cleric who was active in Portuguese politics in the 1250s and 1260s, and whose rise through the ecclesiastical hierarchy can be traced with some accuracy, is the same Petrus Hispanus who wrote the famous treatise, the *Summulae logicales*, commentaries on the Pseudo-Dionysius, commentaries on the key natural philosophy texts of Aristotle, and a variety of both academic and practical medical works. There was also a Petrus Hispanus who practised and taught medicine in Siena between 1245 and 1250 (8). All these problems of identity are beyond the scope of this paper, It is enough to accept that there was a Portuguese physician known as Petrus Hispanus in the mid-thirteenth century. The intention here is to put forward some ideas about how he and his colleagues were taught medicine, and by whom, with the aim of opening up the Portuguese context in this discussion.

The main debate concerning Petrus Hispanus, which has hardly been looked at from a Portuguese perspective, is the question of whether he studied medicine at Montpellier (9). The historian who has had

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- (7) MEIRINHOS, José Francisco. Petrus Hispanus Portugalensis? Elementos para uma diferenciação de autores. *Revista Española de Filosofía Medieval*, 1996, 3, 51-76; D'ORS, Angel. Petrus Hispanus O.P., *Auctor Summularum. Vivarium*, 1997, 35, 21-71. Both authors build on the earlier challenge of SIMONIN, H. D. Les *Summulae Logicales* de Petrus Hispanus. *Archives d'histoire doctrinale et littéraire du moyen âge*, 1930, 5, 267-278.
- (8) For Petrus Hispanus' stay in Siena see the documents in STAPPER, Richard. Pietro Hispano (Papa Giovanni XXI) ed il suo soggiorno in Siena. *Bullettino Senese di Storia Patria*, 1898, 5, 424-431 and LAURENT, Marie Hyacinthe. Il soggiorno di Pietro Ispano a Siena. *Bullettino Senese di Storia Patria*, 1938, 9, 42-47. The most up-to-date study of the University of Siena in this period adds little that is new: NARDI, Paolo. *L'Insegnamento superiore a Siena nei secoli XI-XIV*, Milano, Giuffrè, [Saggi e documenti per la storia dell'Università di Siena 2], 1996.
- (9) For an overview of medical studies at Montpellier, see BULLOUGH, Vern L. The Development of the Medical University at Montpellier to the End of the Fourteenth Century. *Bulletin of the History of Medicine*, 1956, 30, 508-523; DEMAITRE, Luke. Theory and Practice in Medical Education at the University of Montpellier in the

most influence in recent years concerning this aspect of Petrus' career is L. M. de Rijk. He believes that Petrus began his studies in the cathedral school in Lisbon, and was then sent to Paris to study Arts and Theology. It is known for certain that John XXI studied in Paris, because of a reference in one of his own papal bulls (10). De Rijk then suggests that Petrus Hispanus studied medicine in Montpellier before leaving for Siena in 1245 (11). This suggestion is based on evidence brought to light by de Rijk, who is interested primarily in Petrus Hispanus' logical works, and who establishes that there was a strong link between these logical treatises and the south of France. Two early commentaries on the *Summulae logicales* were written in Toulouse and Montpellier, and the Dominican house in Toulouse seems to have been involved in the diffusion of Petrus' works (12). Furthermore, two early-modern authors, Rodrigo da Cunha in 1635, and Nicolas Antonio in 1696, both point to Montpellier as a place of study associated with Petrus Hispanus (13). Late sources, such as these, are crucial to research in the history of medicine in Portugal, and indeed are vital to an understanding of medieval Portuguese history, and should not therefore be dismissed simply because they are so late. Finally, de Rijk feels that to have been employed by the University of Siena, Petrus Hispanus must have come from a medical school of some repute. This had to have been Montpellier in this period (14).

Thirteenth and Fourteenth Centuries. *Journal of the History of Medicine and Allied Sciences*, 1975, 30, 103-123.

(10) RIJK, note 2, p. 127.

(11) RIJK, note 2, pp. 146-147.

(12) RIJK, note 2, p. 150. Meirinhos, who has studied the same commentaries, gives clear evidence that they were written towards the end of the thirteenth century, rather than in the 1240s; however, the location is not challenged: see MEIRINHOS, note 7, p. 54.

(13) RIJK, note 2, p. 146, who is referring to the *História Ecclesiástica dos arcebispos de Braga e dos santos e varoes illustres que florecerão neste arcebispado*, Braga, 1634-35, pp. 152-160. Rijk is not aware of ANTONIO, Nicolas. *Bibliotheca Hispana vetus*, Roma, 1696, vol. 2, p. 50. See also SERRAO, Joaquim Veríssimo. *Les Portugais à l'Université de Montpellier (XIIe-XVIIe siècles)*, Paris, Fundação Calouste Gulbenkian, Centro Cultural Português, 1971, p. 28.

(14) RIJK, note 2, p. 146.

The problem with this last theory is that one need only glance at the documents relating to Petrus Hispanus' stay in Siena to realize that the *studium generale* there, only founded in 1240, had to struggle to survive and that Petrus Hispanus seems to have been a struggling physician in Siena. Although the first document to mention him is dated 11 January 1245, there is no evidence that he was being paid by the commune until Autumn 1248. Also, in February 1248 he had to sell a valuable Bible, and was living in a poor quarter of Siena (15).

There are, however, other reasons why Montpellier remains the likeliest place. If we look at the south of France from a Portuguese perspective, there are natural links between the two regions (16). There were always important trading and communication contacts, and the south of France lies on the main route from the Iberian Peninsula to Burgundy, Italy, and beyond. Even more significantly, Montpellier lies on one branch of the *camino francés*, the pilgrim route to Santiago de Compostela in Galicia; Coimbra in Portugal lies on another branch. It is often forgotten that Portugal, like neighbouring Castile, was affected by the social and economic changes brought from the north via this route (17). There is no reason why the *camino francés* could not have been a two-way route. If the outside world came to Portugal this way, then why could the Portuguese not venture forth by the same route?

Extremely significant in this context is the only firm evidence which connects Petrus Hispanus to Montpellier. This is a document he witnessed there in October 1259. As he was in Guimarães in Portugal between May and July 1259, and in Lisbon in November 1261, it seems he was on his way to the papal curia and broke his journey in Montpellier (18).

(15) For the earlier document, see LAURENT, note 8, p. 44. For the later one, see STAPPER, note 8, pp. 430-431. For a discussion, see NARDI, note 8, p. 61.

(16) The only historian to consider this perspective for this period is SERRAO, note 13, pp. 15-34.

(17) SERRAO, note 13, p. 16. See also MATTOSO, José. *Monges e clérigos portadores da cultura francês em Portugal (séculos XI e XII)*. In: *Portugal Medieval, Novas Interpretações*, 2nd edition, Lisboa, Imp. Nacional-Casa da Moeda, 1992, pp. 365-387 for French influence on Portuguese culture.

(18) SERRAO, note 13, pp. 28-29. For documents relating to Petrus Hispanus' activity in Portugal, see SÁ, note 3, pp. 59-93 and CAEIRO, Francisco da Gama. *Novos*

Whether he had been a student there or not, Petrus Hispanus would have been familiar with the town.

There is less evidence that Portuguese students studied in Montpellier during the twelfth and thirteenth centuries. Modern historians have discussed at some length the authenticity of a document of King Sancho I of Portugal (1185-1211), in which the king granted 400 morabitinos each year towards the expenses of canons of Santa Cruz de Coimbra who were studying *in partibus galliae* (19). On the face of it, this appears to be firm evidence that the Portuguese were studying in France, and most Portuguese medical historians have seen it as a possible reference to medical studies in Montpellier (20). However, the only known copy of the document is published by a seventeenth-century chronicler, Nicolas de Santa Maria (1600?-1675). Santa Maria's chronicle (1668) is another late source but, unfortunately one which is deeply suspected by some historians (21). On the other hand, it would be absurd to reject such an

elementos sobre Pedro Hispano: contribuição para o estudo da sua biografia. *Revista Portuguesa de Filosofia*, 1966, 22, 157-174. Caeiro points out that Petrus Hispanus must, in fact, have been in Anagni in the presence of Pope Alexander IV in January 1260 (p. 159).

- (19) SANTA MARIA, Nicholas de. *Crónica da Ordem dos Cônegos Regrantes do patriarcha S. Agostino*, Lisboa, 1668, 2nd part, p. 58.
- (20) The vague phrase *in partibus galliae* is an interesting feature of this document. It is remarkably similar to the description of the origins of João Peculiar, one of the founding canons of Santa Cruz, which is given in a twelfth-century life of another founder, St. Tello. Here it is said of João Peculiar that *de Gallie partibus adventu*, which is usually taken to mean that he was French or studied in France. It is possibly further evidence of canons studying abroad from a contemporary source: see COSTA, Avelino de Jesus da. D. João Peculiar, co-fundador do mosteiro de Santa Cruz de Coimbra, bispo do Porto e arcebispo de Braga. In: *Santa Cruz de Coimbra do século XI ao século XX: estudos*, Coimbra, Gráfica de Coimbra, 1984, pp. 59-83.
- (21) For example, Joaquim Veríssimo Serrão describes Santa Maria's chronicle as «uma fonte pouca digna pelas muitas falsidades de que está recheada». SERRÃO, Joaquim Veríssimo. *A Historiografia Portuguesa*, Lisboa, Editorial Verbo, 1973, p. 234. Serrão does not explain the nature of these «falsities», but he does point to the comparable reliability of another chronicler of Santa Cruz, Timóteo dos Mártires (d.1686). It is significant that there is no mention of Sancho I's document or of the medical studies of Mendo Diaz (see p. 12) in Timóteo dos Mártires' work, which remained in manuscript until forty years ago: ROCHA MADAHIL,

important document, considering that these critical historians never explain their doubts, and there is no critical analysis of the chronicle. Furthermore, Gama Caeiro has shown that the document does have verisimilitude and does not appear to belong to a later period (22).

The only clear evidence that Portuguese students did study medicine in Montpellier is literary, not documentary, and is found in two thirteenth-century satirical poems, preserved in the *Cancioneiro* of the National Library in Lisbon (23). Both poems refer to a Mestre Nicolas who went to study medicine in Montpellier; he returned with medical texts but, despite increased pride and greed, knew no more than before. To have become the subject of satire, Mestre Nicolas must have belonged to a tradition of Montpellier-trained physicians. Otherwise the troubadours would have had no impact on their Portuguese and Castilian noble audiences. This evidence is circumstantial but it is apparent that future studies of Portuguese physicians, especially Petrus Hispanus, should consider their careers from a broader perspective that includes a Portuguese element.

The second Portuguese physician whose career and medical training should be discussed is Giles of Santarém. Giles is virtually unknown to the English-speaking world, and even in Portugal there has been little interest in him as a physician (24). Giles was born in the Portuguese

António Gomes da (ed.). A Crónica do Mosteiro de S. Cruz de Coimbra de D. Timóteo dos Martires. *O Instituto*, 1944-1960, 103-122. However, without a careful analysis of both texts, it is not possible to elaborate on this point.

- (22) CAEIRO, note 6, pp. 65-67. He points out that the document is dated to 14 September 1190 and refers to Sancho I as *Sancius Dei gratia Portugalliae et Algarbii Rex*. Although «King of the Algarve» became a normal title for Portuguese kings from the mid-thirteenth century, with the capture of the last Islamic territory in the south, it could only have been claimed by Sancho around the time at which the document is dated. He conquered Silves in the Algarve in September 1189, but lost it again in 1191; it was not recaptured until 1249. This suggests that the document published by Santa Maria is genuine.
- (23) SERRAO, note 13, pp. 32-34. The text of the verses can be found in LAPA, Manuel Rodrigues (ed.). *Cantigas de escarnho e de mal dizer dos cancioneiros medievais galego-portugueses*, Vigo, Editorial Galaxia, 1965, number 42, p. 75 and number 332, pp. 494-495.
- (24) Giles of Santarém has rarely attracted the interest of historians, despite the fact that he must have been a leading figure of his own time. Examples of relevant

diocese of Viseu in 1185/90, and he died in 1265 in Santarém, a town some two hours up the river Tagus from Lisbon. Since the sixteenth century, if not earlier, a complex Faust-like legend has grown up around Giles, which makes it difficult to reconstruct his biography (25). However, there appear to be fewer identification problems than there are with Petrus Hispanus. It is known that Giles of Santarém became a Dominican friar in around 1225 and spent some time working in the infirmary of the Dominican house of St Jacques in Paris during his novitiate, sharing his cell with Humbert of Romans, later the fifth Master General of the Order (26). Giles then returned to Iberia and became Prior Provincial of Hispania in 1233. After his death in 1265 a local cult seems to have grown up around his tomb in the Dominican Priory in Santarém. He was finally canonized in 1748.

There is considerable evidence for Giles' medical activity, and a number of medical manuscripts survive attributed to him (27).

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- studies and editions are OLIVEIRA, João de. *Frei Gil de Portugal: médico, teólogo, e taumaturgo*, Braga, Livraria Editoria Pax, 1991; NASCIMENTO, Aires Augusto (ed.). *A vida do bem-aventurado Gil de Santarém por Fr. Baltazar de S. João*, Lisboa, INIC, 1982; PEREIRA, Virgínia da Conceição Soares. *O Aegidius Scallabitanus de André de Resende: estudo, introdutório, edição crítica, tradução e notas*, Braga, Universidade do Minho dissertation, 1995. Giles of Santarém is also mentioned in WICKERSHEIMER, Ernest. *Dictionnaire biographique des médecins en France au moyen âge*, Genève, E. Droz, 1936, vol. I, p. 199, [reprint: 1979]. Finally, Mary Wack gives some information on Giles: WACK, Mary. *Lovesickness in the Middle Ages: the Viaticum and its Commentaries*, Philadelphia, University of Pennsylvania Press, 1990, pp. 74-82.
- (25) Most of our information about Giles of Santarém is known from sixteenth-century *Vitae* written by André de Resende, edited by PEREIRA, note 24, and Baltazar de São João, edited by NASCIMENTO, note 24. Both authors relate that Giles was tempted by the devil on his way to Paris and was persuaded to study black magic in Toledo for seven years. He later converted and returned to Portugal to join the Dominicans, after enjoying great fame for the demonic healings he carried out. An important part of my doctoral thesis will be to examine this legend and discover how much of its biographical information is reliable.
- (26) For the *Vitae Fratrum* see GIRARDUS DE FRACHETO. *Lives of the Brethren of the Order of Preachers, 1206-1259*, London, Blackfriars Publications, 1955, p. 172, [translated by Placid Conway, notes and introduction by Bede Jarrett].
- (27) See KAEPPELI, Thomas. *Scriptores Ordinis Praedicatorum Medii Aevi*, Roma, Istituto storico Dominicano, 1970, vol. 1, pp. 16-17 for a list of manuscripts attributed to
- DYNAMIS. Acta Hisp. Med. Sci. Hist. Illus.* 2000, 20, 305-329.

Consequently, he is a close contemporary of Petrus Hispanus with a much more narrowly defined career and writings (28). It is, therefore, very interesting to see the striking differences between the studies of the two physicians. For example, nobody has ever suggested that Giles acquired his training in Montpellier. It simply has never entered into the discussion. Why is it that a place deemed so natural a centre for medical study is not considered by any historian of Giles, whether early-modern or more recent? It is not just that his life has rarely generated interest. Instead, it is believed that Giles studied medicine in one of two other places, or perhaps both.

First of all, there is Paris, not believed suitable for Petrus Hispanus by de Rijk because it was never known for medicine in this period (29). This does not mean to say that nobody studied there. Furthermore, with Giles of Santarém, there is the added element of the Dominican Order. Was Giles' presence in the Dominican infirmary in Paris simply pious

Giles. These include a translation of the *Liber de secretis in medicina* of Rhazes, a *Remedi di diverse malattie*, and various stories in the *Vitae Fratrum*. For a study of the last part of the *Liber de secretis in medicina*, which is actually a translation of a work by Yūhannā Ibn Māsawayh (John Mesue), see JACQUART, Danielle; TROUPEAU, Gérard (eds.). *Le livre des axiomes médicaux (Aphorismi)*, Genève, Droz, 1980, [Hautes Études Orientales, 14]. In addition, there is a commentary on the *Viaticum*, which is believed by WACK to be by Giles of Santarém: for the text, see WACK, note 24, pp. 206-211. Finally, the fifteenth-century Portuguese manuscript Évora, Biblioteca Pública, MS CXXI/2-19 contains two short works attributed to Giles: the *Livro de naturas* and *Synaees mortaes*: see CUNHA RIVARA, Joachim Heliodoro da; MATOS, Joachim Antonio de Sousa Telles de (eds.). *Catálogo dos manuscritos da Bibliotheca Publica Eborensis*, Lisboa, 1871, vol. 4, pp. 279-284.

- (28) There is a theory that Giles of Santarém actually taught Petrus Hispanus medicine. This was first suggested by WACK, note 24, p. 84, who believes that Giles was the author of a scholarly commentary on the *Viaticum* which has similarities to one written by Petrus Hispanus. She feels Giles must have been a university master, probably at Paris. This is a theory which I shall be looking at closely; although two churchmen from the same country, with similar medical interests, who were both probably at Paris in the 1220s, might have known each other, there are at present too many problems with their respective chronologies to suggest a teacher/pupil relationship.
- (29) RIJK, note 2, p. 146.

duty, or was there a more formal reason? Were the Dominicans exploiting or developing his medical skill? The attitude of the Dominicans to physicians and medical study is a neglected field of research. Looking through the main source for early Dominican history, the *Vitae Fratrum*, completed in 1260, there is evidence for several physicians, including Giles and a fellow friar of Santarém (30). This suggests that the possibility of Dominican involvement in the teaching, or at least encouragement, of medicine, should not be overlooked.

The second place frequently cited as the location of Giles of Santarém's medical studies is not in France at all, but the town of Coimbra in Portugal, and more specifically, the Augustinian house of Santa Cruz de Coimbra. Again, it is early-modern sources which supply this information. Unfortunately, the two most important sources, although they both refer to Giles' early studies in Coimbra, are unclear which institution Giles attended. André de Resende (1500-1573) in his life of Giles, published in 1586, says that Giles frequented the «masters of Coimbra», and that the study of *litterae* flourished there (31). Baltazar de São João's 1537 account refers simply to the *academia* of Coimbra (32). All of these could refer to the cathedral school. The tradition of Coimbra itself, however, never varies, and appears to be founded on fact. It is possible to show how a tradition of medical interests and teaching in Coimbra can be supplemented by documentary evidence. It is fragmentary and scattered but it does suggest that there was a school of medicine at Coimbra, or at least an environment which strongly encouraged medical study.

(30) See GIRARDUS DE FRACHETO, note 26, pp. 61-62, 155, 160, and 226 for Dominican physicians. There are numerous other references to infirmarians, hospitals, and general medical care.

(31) PEREIRA, note 24, p. 233.

(32) NASCIMENTO, note 24, p. 132. Later authors also refer to Giles' studies in Coimbra, for example, SOUSA, Luís de. *Primeira Parte da História de S. Domingos*, first published in 1623, reprinted in Lisboa, 1866, vol. 1, p. 186. However, it is not until Nicolas de Santa Maria in 1669 that Giles is specifically said to have studied at Santa Cruz: ROCHA MADAHIL, note 21, p. 58. Is Santa Maria merely stating what earlier sources believed too obvious to state—that Coimbra was famous for medicine because of Santa Cruz—or was he promoting his priory for personal reasons? This is a problem that needs to be looked at in some detail.

The Portuguese town of Coimbra was captured from the Moors by Fernando I of León in 1064. In 1096, Alfonso VI of León-Castile granted Coimbra, and the county of Portucale to the north, to his illegitimate daughter Teresa and her husband, Henry of Burgundy, thus creating the heartland of the later kingdom; the son of this couple, Afonso Henriques (1128-1185) became the first Portuguese king. By 1150, the urban area of Coimbra covered some 37-40 hectares, and had nine urban parishes. Thus it was the biggest Portuguese town of the period, being more than twice the size of Lisbon which was not captured from the Moors until 1147 (33).

It was to be expected that a town of this size soon attracted the attention of both the Portuguese royal family and the new religious orders that entered Portugal during the twelfth century. In fact, King Afonso Henriques and the influential new order of the Augustinian Canons targeted Coimbra in the same year, 1131. In that year, the king made Coimbra the central base of his itinerant court, abandoning Guimarães much further north, which was a less effective centre for the rapidly expanding territory. 1131 also saw the foundation of Santa Cruz de Coimbra by a group of Portuguese cathedral canons who had been profoundly influenced by the life of Canons Regular whom they had met in Avignon on their way to and from Rome. This established another connection with the south of France (34). A close and mutually beneficial relationship grew up between the royal family and the Augustinian priory. Both the first two kings of Portugal chose to be buried in Santa

(33) COELHO, Maria Helena da Cruz; HOMEM, Amadeu L. de Carvalho (eds.). *Nova história de Portugal III: Portugal em definição de fronteiras, do condado portucalense à crise do século XIV*, Lisboa, Presença, 1996, pp. 17 and 393. There are not many modern histories of Portugal in English, and virtually none that deal in detail with Portugal before the period of the discoveries in the fifteenth and sixteenth centuries. OLIVEIRA MARQUES, Antonio Henrique R. de. *History of Portugal: From Lusitania to Empire*, New York/London, Columbia University Press, 1972, vol. 1, is probably the best introduction. The marriage between Teresa and Henry of Burgundy was the main reason why northern cultural and religious developments began to influence Portugal.

(34) The close relationship between the royal family and Santa Cruz is emphasized by MATTOSO, José. Cluny, cruzios, e cistercienses na formação de Portugal. In: MATTOSO, note 17, pp. 101-121.

Cruz, and the canons benefited greatly from royal grants and privileges. This is illustrated by the will of Sancho I, dated 1209, in which he left Santa Cruz 10, 000 morabitinos, a cope, a golden cup, a chalice, and a hundred silver marks, in addition to some local mares and pigs (35). These circumstances, taken together, help to explain why, by the beginning of the thirteenth century, Santa Cruz was one of the most important cultural centres in Portugal (36).

The medical interests of Coimbra may be detected from an early period, well before the foundation of Santa Cruz. It is possible that this was the result of the presence of a sizeable Mozarab population in the town. The governor of Coimbra until 1091 was Sisnando Davídez, an influential Mozarab who had previously been powerful in Toledo, and had strongly resisted the introduction of the Latin rite by Cluniac clergy, gaining influence in the Peninsula during this period. He formed the centre of similar resistance in Coimbra (37). Unfortunately, the possible diffusion of Arabic medical texts amongst Portuguese Mozarabs does not seem to have been studied in depth. However, there are a few significant pointers. In his will of 1090, the Mozarab bishop of Coimbra, Paterno, left books to the cathedral which included the ubiquitous *Etymologiae* of Isidore of Seville, and more significantly, «a book of canons written in Arabic, and other books from Seville, and two astrolabes, and a silver tube, and a silver ampoule containing balsam» (38). The

(35) SOUSA, António Caetano de. *Provas da História Genealógica da Casa Real Portuguesa*, first published in 1739, reprinted in Coimbra, Atlântida-Livraria Editora, 1946, vol. 1, pp. 24 and 25: *Monasterio Sanctae Crucis ubi corpus meum sepiliri iubeo mando X. & meam capellam, & copam meam auri, ut faciant ex ea unam Crucem, & unum Calicem, & C. March. argenti ... Mando adhuc ut Monasterium Sanctae Crucis habeat meas equas, & meas porcas de Colimbria...*

(36) For the way in which these political and social circumstances also made Coimbra a centre for the collection and dissemination of books and documents see COSTA, Avelino de Jesus da. Coimbra—centro de atracção e de irradiação de códices e de documentos, dentro da península, nos séculos XI e XII. *In: Actas das II Jornadas Luso-espanholas de História Medieval*, Porto, Instituto Nacional de Investigação Científica, 1990, vol. 4, pp. 1309-1334.

(37) For further background detail, see MacKAY, Angus. *Spain in the Middle Ages: From Frontier to Empire, 1000-1500*, 2nd edition, London, Macmillan, 1991, pp. 20-25.

(38) DAVID, Pierre; SOARES, Torquato de Sousa (eds.). *Liber anniversariorum Ecclesiae Cathedralis Colimbriensis (Livro das Kalendas)*, Coimbra, [no publisher given], 1947,

combination of Arabic texts and practical, probably surgical, instruments and ingredients, is intriguing.

Also surviving from this pre-Santa Cruz period, but preserved as the guard-pages of later theological manuscripts produced in the Santa Cruz *scriptorium*, are fragments of medical texts (39). António Cruz, the first person to identify and catalogue these fragments, believes they belong to the end of the eleventh century or the beginning of the twelfth and are written in a Visigothic hand. The fragments are the remains of a number of medical texts: commentaries on Hippocrates, especially the *Aphorisms*, and an unidentified herbal. According to Cruz, these manuscript folios are the survivors of a more extensive medical library (40).

Santa Cruz seems to have continued the practical and intellectual interests of this earlier medical tradition which, presumably, was associated with Coimbra cathedral. It was, after all, a group of cathedral canons who founded Santa Cruz. Santa Cruz is known to have had more than one hospital. One for the poor is mentioned in an exchange of letters at the end of the twelfth century between the Prior of Santa Cruz and the Prior of the Augustinian house of São Vicente de Fora, founded in Lisbon shortly after its capture in 1147 (41). In these letters the Prior

vol. 2, p. 122: *et librum canonicum arabice scriptum et alios libros Spalenses et duo strolabia et unam fistulam argenteam et unam ampulam argenteam cum balsamo*. For a brief discussion of the cultural contribution of the Mozarabs in Portugal, see the articles by MATTOSO, José. Orientações da cultura portuguesa no principio do século XIII. In: MATTOSO, note 17, pp. 225-239, especially p. 231, and MATTOSO, José. Os moçárabes. In: *Fragmentos de uma Composição Medieval*, Lisboa, Estampa, 1993, pp. 19-34. For comments on Paterno's will and the identification of the texts, see COSTA, note 20, pp. 1315-1319.

(39) Porto, Biblioteca Pública Municipal (B.P.M.P), MSS Santa Cruz, 13, 50, 55 and 73. See the new *Cátalogo dos códices da Livraria de mão do Mosteiro de Santa Cruz de Coimbra na Biblioteca Pública Municipal do Porto*, Porto, Biblioteca Pública do Porto, 1997, pp. 103, 242, 262 and 315.

(40) CRUZ, note 6, pp. 217-219.

(41) CAEIRO, Francisco da Gama. A assistência em Portugal no século XIII e os cónegos regrantes de Santo Agostinho. In: *A pobreza e a assistência aos pobres na península ibérica durante a idade média: Actas das 1^{as} jornadas luso-espanholas de história medieval*, 2 vols., Lisboa, Instituto de Alta Cultura, 1973, vol. 1, pp. 219-229, at p. 226.

of S. Vicente is seeking advice from the motherhouse concerning the tithes which support the hospitals of the two houses. A separate hospital for sick canons is known to have existed from references in a codex of Santa Cruz known as the *Gemma Corone* (42). There is no evidence that the sick poor were treated in their hospice, or that outside patients were allowed to enter the cloister for treatment. To this extent, Santa Cruz and S. Vicente did not differ from any other Augustinian house. There is a clear indication in the letters mentioned above that the priors drew their inspiration from the Rule of St Augustine which called for poor relief to be given, and specifically outlined the care to be given to sick and aged canons (43). Thus, the two Portuguese houses can be compared to Barnwell Priory in England (founded 1112), the observances of which are laid out in a manuscript of 1295/6. These include details of an infirmarer's and an almoner's duties, those of the former including a description of different grades of illness, and those of the latter concerning both alms-giving and the reception of the sick and aged poor (44). There is little to suggest that Santa Cruz was, in fact, any different to any other European monastery. However, if the presence of some sort of hospital is linked to the existence of a considerable medical library, a tradition of teaching, and the activity of physicians in Coimbra, it does seem that we have here more than the usual monastic concern for health and well-being.

There are numerous individuals with medical interests associated with Santa Cruz or Coimbra cathedral during the thirteenth century. Interestingly, only one historian, Américo Pinto, has ever connected Petrus Hispanus to Santa Cruz (45). This may be because perhaps only

(42) CAEIRO, note 41, p. 228. The full title of the codex is the *Gemma Corone claustralium et speculum prelatorum ordinis Sancti Augustini*, Porto, B.P.M.P., MS Santa Cruz, 93, ff. 98v. and 99r.

(43) AUGUSTINE. *The Rule of St Augustine, Masculine and Feminine Versions*, London, Darton, Longman & Todd, 1996, pp. 15 and 21 [introduction and commentary by Tarsicius J. van Bavel, translated by Raymond Canning].

(44) CLARK, John Willis (ed.). *The Observances in Use at the Augustinian Priory of S. Giles and S. Andrew at Barnwell, Cambridgeshire*, Cambridge, Macmillan and Bowes, 1897, pp. 173-179 and 203-209.

(45) PINTO, Américo. A primeira escola de medicina em Portugal. *Acção Médica*, 1947-48, 12, 552-564, at 561. Pinto is not reliable; he makes a number of odd remarks,

canons could benefit from the claustral education, and John XXI was a secular cleric (46). However, he could still have been part of the intellectual climate dominated by Santa Cruz in this period. Other significant figures are a Magister Raymundus and a *domnus* Pedro Peres, both mentioned in an account of the Provincial Chapter of 1228 in the *Gemma Corone*. The former, Raymundus, is described in the text as *profundissime in diversis scientiis literatus*. Pedro is even more prestigiously described as being *magno in Gramatica, Medicina et Logica et in theologia qui per obtime predicabat*. Who are these exceedingly well-educated canons? Are they, as António Cruz suggests, the masters of the claustral school of Santa Cruz? Similarly, Gama Caeiro, in his attempt to discover what form of education St. Anthony of Lisbon/Padua, the subject of his study, might have received at Santa Cruz, proposes these canons as his teachers (47).

The obits of people identified as *fisici* are recorded in the *Livro das Kalendas* of Coimbra Cathedral. For example, Master Giles of Leiria in 1237, Master João in 1242, and Master João Andres in 1281. In 1285, João Gonçalves «Chancinho» left a number of books to the cathedral chapter, including three books of *física* and a lapidary (48). The most problematic reference to medicine in Coimbra is a story told by Nicolas de Santa Maria, the seventeenth-century chronicler already referred to, whose words must be treated with great caution. He tells us that during the reign of Sancho I, the Prior of Santa Cruz, Gonçalo Diaz, instructed his nephew, Mendo Diaz, who was at the University of Paris, to abandon theology and take up medicine. Mendo then returned to Santa Cruz

for example, that Petrus Hispanus inaugurated a chair of Obstetrics in the University of Montpellier (p. 559).

(46) RIJK, note 2, p. 127, note 2. John XXI is thought to be a secular cleric because when Ricobaldo of Ferrara lists the cardinals created by Gregory X at the Second Council of Lyons in 1274, he takes care to note that Peter of Tarentaise and Bonaventura were members of the Dominican and Franciscan orders, respectively, but fails to give similar information about Petrus Hispanus, who is made Cardinal-Bishop of Tusculum. See text in MURATORI, Ludovico Antonio (ed.). *Historia Imperatorum. In: Rerum Italicarum Scriptores*, Mediolani, 1726, vol. 9, column 140.

(47) CAEIRO, note 41, pp. 224-225; CRUZ, note 6, pp. 215-217; CAEIRO, note 6, p. 58.

(48) DAVID; SOARES, note 38, vol. 1, p. 186 (Giles of Leiria); vol. 2, p. 114 (João); vol. 2, p. 147 (João Andres); vol. 2, pp. 273-278 (João Gonçalves).

and became the first to lecture in medicine in Portugal (49). Can this story be accepted, coming as it does shortly after the document of Sancho which provided students such as Mendo with the funds for study abroad? If it can, then this is clear evidence of medical teaching in Santa Cruz. Although this story is extremely important, it should be remembered that Santa Maria was writing in a period during which the Portuguese university had finally settled in Coimbra. Since its foundation in Lisbon in 1290, it had moved back and forth between Lisbon and Coimbra five times. Santa Maria was keen to present the pre-history of the university in his city, and especially show that its roots lay in his own priory.

All these references, however, pale in comparison to the three most important pieces of evidence for medical teaching in Santa Cruz. These are three book lists dated to 1207, 1218 and 1226, respectively. They are all found scribbled on the verso of the last folio of a Santa Cruz manuscript now in the Public Library in Oporto (50). The lists record the granting of books from the library of Santa Cruz to three individuals. So faint is the script in the booklists that it was not until the analysis of António Cruz in 1964 that the words were seen as more than «imperceptível» notes (51). The grants are perhaps recorded in such a careless manner because they belong to the Priorate of João Cesar (1196-1226), a period of laxity and political instability in Santa Cruz (52).

The majority of the books granted in these lists are medical. The first list of December 1207 refers to the *Viaticum* of al-Jazzar, translated by Constantine the African (d.1087); the *Passionarius*, attributed to

(49) SANTA MARIA, note 19, pp. 58-59; CRUZ, note 6, p. 220; CAEIRO, note 6, p. 61.

(50) Porto, B.P.M.P., MS Santa Cruz, 34.

(51) CRUZ, note 6, p. 192.

(52) CRUZ, note 6, pp. 193-198. It was also at this time that the future St Anthony of Lisbon, dismayed by the lack of discipline in his priory, was attracted to the stricter lifestyle of a group of Franciscans who were passing through Portugal on their way to Morocco, and, as it turned out, martyrdom, in 1220. However, monastic booklists were not infrequently written down on miscellaneous pieces of paper: see WEBBER, T.; WATSON, A. G. (eds.). *Corpus of British Medieval Library Catalogues: Libraries of Augustinian Canons*, London, British Library, 1998.

Gariopontus of Salerno; and a *Liber Gradibus* (53), which is probably the antidotarium of Constantine known as the *De gradibus simplicium*. These books were given to Pedro Vicente, a canon of S. Vicente in Lisbon.

The list of July 1218 is a longer and more varied group of fifteen books. The medical texts included are the ninth book of *Almanson* (or the *Kitab al-Mansuri*) of Rhazes (d.925), and a codex which contains a copy of *Macer Floridus de virtutibus herbarum*, a twelfth-century herbal; a lapidary; some unknown appendices; *multis experimentis*, probably medical recipes; and a practical treatise on precious metals and dyes. All the other books could conceivably belong to the study of the trivium or quadrivium of the Seven Liberal Arts, being related to logic, grammar, geometry, arithmetic, and astrology. These books were granted to a Master Giles (54).

The third list of 1226 grants to a Pedro Peres two further medical texts. These are another, or the same, copy of the *Almanson* of Rhazes, and a work by the medical commentator of Salerno, Petrus Musandinus, the title of which is illegible (55). Pedro Peres is probably the same individual described above as *magnus*, owing to his prowess in medicine, logic, grammar, and theology, and who Cruz believes played a key role in the claustral school.

These three lists of books (all referring to codices presumably produced by the *scriptorium* of Santa Cruz) are believed by António Cruz to have been used for teaching the Seven Liberal Arts in the priory school. Why else, he asks, would time have been taken to copy them? (56) The copying of books, of course, does not imply that they were being used for teaching. However, grammar, certainly, was taught in all monasteries using the texts of Priscian, also listed in the grant of 1218. If the

(53) CRUZ, note 6, p. 192 and pp. 199-200, transcribes the name of this book as the *Liber Gradius*. The new *Catálogo dos códices*, xcii, renders it as *Liber gradium*. It is, indeed, extremely difficult to determine which it is: an original scribal error probably explains the confusion.

(54) CRUZ, note 6, pp. 192-193 and pp. 200-207.

(55) CRUZ, note 6, p. 193 and pp. 208-209.

(56) CRUZ, note 6, p. 209.

appearance of texts relating to the other Liberal Arts of geometry and astrology can also be taken as evidence of the teaching of these subjects, then why not see the medical texts in a similar light? Were these books being granted or lent to these individuals, Pedro Vicente, Giles, and Pedro Peres, for the purposes of teaching or for individual study? It is stated that Pedro Vicente was a canon of S. Vicente, which, as it would surely also have had a school, suggests that there was dissemination of texts between the two Augustinian houses (57). Dissemination does not necessarily involve teaching but can indicate the passing on of learning between interested people.

The recipient of the longest list of books, for 1218, has caused the most debate. Was this Master Giles the person we now know as Giles of Santarém? António Cruz believes that this was the case, and that Giles of Santarém was a colleague of Pedro Peres in the teaching of medicine in Santa Cruz (58). It is not impossible that he was the recipient as he certainly maintained a connection with Coimbra throughout his life - his own obit is found in the *Livro das Kalendas* for 1265 (59). Also, there exists a translation of the *Liber de secretis in medicina* of Rhazes attributed to Giles of Santarém. It is tempting to connect this interest in Arabic medicine with the Rhazes text in the book list of 1218. However, there is as yet no firm evidence to support this, and Gama Caeiro has pointed out the existence of at least two other figures named Giles associated with medicine and Coimbra in this same period (60). The Giles of Leiria whose death is recorded in the cathedral records in 1237 has already been mentioned. There was also another Giles of Leiria who deposited a copy of his will in the Coimbra Cathedral archives in

(57) Further evidence for the dissemination of books between the two houses can be found in the contemporary booklist which survives for S. Vicente. Although this list of 116 volumes does not include medical texts and makes no mention of Pedro Vicente, it does note that nine books are on loan to other centres, including Santa Cruz. The texts do imply a high level of education. See NASCIMENTO, Aires Augusto. *Livros e claustro no século XIII em Portugal, o inventário da Livraria de S. Vicente de Fora, em Lisboa. Didaskalia*, 1985, 15, 229-242.

(58) CRUZ, note 6, p. 229.

(59) DAVID; SOARES, note 38, vol. 1, p. 246.

(60) CAEIRO, note 6, p. 62, note 35.

1257 (61). The long gap between the dates of the will and the obit makes it highly unlikely that this is the same Giles. However, it is possible, from the details of the second Giles of Leiria's will, that he was the recipient of the grant of books of 1218.

Giles of Leiria drew up a will in February 1257 which was to replace an earlier one, presumably rendered invalid because of the death of his mother, Maria Gonçalves. He also states that he has a brother named Raimundo. These family details confirm that this person is certainly not Giles of Santarém himself. His family background is a complex problem that is currently under investigation. The bulk of Giles of Leiria's bequests consists of more than thirty books, most of which he left to the Franciscans of Leiria. Quite what use the friars made of this large donation of texts is unknown. As was commented earlier concerning the role of the Dominicans in Giles of Santarém's career, more work needs to be done on the attitudes of the Mendicants towards medicine. Several of the books are key legal texts, and therefore Giles of Leiria's will has mainly attracted the attention of legal historians. Twenty-one of the books, however, lie in the field of medicine or natural philosophy. There are practical, surgical and veterinary texts of such variety that the possessor of this library would have had at hand a complete range of medical treatments (62). There is, for example, a copy of the *Circa instans*, a list

(61) CAEIRO, note 6, pp. 62-62, note 35. The will has been published wholly or in part by SÁ, note 3, pp. 69-70; LOPES, F. Félix. Breves notas a dois documentos. *Colectânea de Estudos*, 1953, 4, 365-372, at 366-370; PEREIRA, Isaias da Rosa. Livros de direito na Idade Média. *Lusitânia Sacra*, 1964-66, 7, 7-60 (16-17). The original document is found in the National Archives of the Torre do Tombo in Lisbon, collection of the Cabido da Sé de Coimbra, m.15, number 34.

(62) The veterinary books included in the list are, as yet, unidentified surgical and anatomical texts on horses and dogs: *Anathomia et cura equorum sive Chirurgia ipsorum... cura canum sive Chirurgia ipsorum*. They might perhaps have a relationship with fourteenth-century treatises on the daily care and medical treatment of horses and falcons written by Mestre Giraldo, a physician of King Dinis: PEREIRA, Gabriel (ed.). *Mestre Giraldo: Tratado das enfermidades das aves de caça*, Lisboa, Oficina Typographica, 1909; PEREIRA, Gabriel. Livro d'alveitaria do mestre Giraldo. *Revista Lusitana*, 1909, 12, 1-60. See also VASCONCELLOS, Carolina Michaëlis de. Mestre Giraldo e os seus tratados de alveitaria e cetraria. *Revista Lusitana*, 1910, 13, 149-432.

of remedies produced by Matteus Platearius in twelfth-century Salerno, and also one codex containing the *Particular Diets*, *Universal Diets*, and *Urines* of Isaac Judeus, a tenth-century Judaeo-Arab author.

The most important texts on the list are contained in a single codex and are obviously seen as a group apart in the will, being given the title *Ars tota completa*. These works are the *Isagoge* of Joannitius (Hunayn ibn Ishaq's ninth-century introduction to Galen's *Tegni*), Galen's *Tegni* itself, the *Aphorisms* and *Prognostics* of Hippocrates, and short tracts on pulses and urines by Philaretus and Theophilus respectively. These works make up the group of texts which by the fifteenth century was known as the *Articella*. They were the main texts used in the teaching of medicine in medieval universities. It is highly significant that these texts were seen as a group in Portugal as early as 1257. Were they already being used for teaching or had Giles simply brought them back from Montpellier or elsewhere, like Master Nicholas in the troubadour verses? If this was the case, why would Giles continue to emphasize the coherence of these texts as a group in his will? Considering that virtually nothing is known of the medical curriculum in the University of Lisbon until the sixteenth century, the fact that these works were already in circulation in the mid-thirteenth century should have been given far more importance than has been the case.

Giles of Leiria's will provokes many as yet unanswerable questions. What is the connexion between this will and the medical interests of Santa Cruz? Is it significant that Giles of Leiria does not leave these texts to Santa Cruz? (63) Can any of the titles be identified with those

(63) It is worth placing this will against the background of the complex relations between Santa Cruz, the city of Coimbra, Leiria, and the Franciscans. Santa Cruz was granted ecclesiastical jurisdiction over Leiria by Pope Adrian IV in 1157; this was resented by the Bishop of Coimbra, in whose diocese Leiria lay, and the rights of the various parties were disputed intermittently for many years. The situation was further complicated in 1231 by the foundation of a Franciscan house in the expanding town. The Franciscans were brought into immediate competition with Santa Cruz and, despite papal intervention, the conflict continued until mid-century. A closer look at this political situation might well throw light on the contents of Giles of Leiria's will: see MATTOSO, José. A cidade de Leiria na história medieval de Portugal. In: *Fragmentos de uma Composição Medieval*, Lisboa, Estampa, 1993, pp. 95-111, especially p. 99 and p. 103.

of the earlier grant of 1218? Only the *Macer* may correspond; it is described in the will as being only part of a whole, and in the list of 1218 it was part of a larger codex. Perhaps in nearly forty years the codex was divided? It is important to remember that Giles of Leiria maintained contacts with Santa Cruz and Coimbra. His will was preserved in the Santa Cruz archives because he left property in the town to the Bishop of Coimbra, and fifty pounds to the priory itself. Was this bequest a sign of gratitude for the earlier loan, as Gama Caeiro suggests? (64) It is possible tentatively to suggest that the Giles who was the recipient of the book grant of 1218 and Giles of Leiria were one and the same person. If this was not the case, then both these men shared a wide-ranging interest in medical and practical knowledge.

To conclude this discussion of the opportunities available to Portuguese students wishing to study medicine in the thirteenth century, a brief look should be taken at the developments taking place in neighbouring Castile during this same period. Medicine in thirteenth-century Castile is being investigated by Luis García Ballester, and his article on the role of the monastery, the cathedral, and the university in the development of medicine in that kingdom, asks questions and provides information which bear comparison with aspects of the Portuguese situation described above (65).

There are many similarities between the two Iberian kingdoms, as far as medicine is concerned. A similar vague involvement of the Mendicant Orders in the diffusion of medical knowledge is observed (66). Most of the works cited in the Santa Cruz book lists and Giles of Leiria's will are, as one would expect, Salernitan or pre-Salernitan in character, and this is again the case in most of the titles listed in the surviving cathedral and monastic library inventories of Castile, and in the surviving codices

(64) CAEIRO, note 6, p. 63, note 35.

(65) GARCÍA BALLESTER, Luis. El papel de las instituciones de consumo y difusión de ciencia médica en la Castilla del siglo XIII: el monasterio, la catedral, y la universidad. *Dynamis*, 1984, 4, 33-63; GARCÍA BALLESTER, Luis. Medical Science in Thirteenth-Century Castile: Problems and Prospects. *Bulletin of the History of Medicine*, 1989, 61, 183-202.

(66) GARCÍA-BALLESTER (1984), note 65, p. 34.

themselves. There seem to be several medieval medical texts still in existence, which is in marked contrast to the fragments which are all that remain in Portugal. It would be interesting to know whether a medical tradition developed around a particular monastery or priory in Castile. What was the role of Augustinian priories, for example, in other parts of Iberia?

Amongst the Castilian manuscripts and inventories are very similar works to those we know once existed in Portuguese libraries. For example, a 1266-1275 list of books in the library of the Archbishop of Toledo includes the *Circa instans*, the *Prognostics*, and a collection of *experimenta*, or medical recipes (67). There are several examples of *Articella* texts in Castilian libraries; however, only one fourteenth-century inventory offers a codex which contains the complete group of works (including the *Regimen of Acute Diseases* of Hippocrates) (68). Does this indicate that the *Articella* works were circulating earlier in Portugal than in Castile? Even if this is not the case, it is clear that Portugal was not backward in comparison with Castile, as far as medical knowledge is concerned. Both regions, of course, were considerably behind developments in France and Italy. There is, for example, no evidence in either kingdom of commentaries on the *Articella* texts, which would be an indication of scholastic techniques used in medical teaching in other areas of Europe. However, the absence of a formal scholastic system does not rule out the existence of interest in and the passing on of medical learning. Bearing in mind the existence of medical texts, Luis García Ballester does ask why medical faculties did not appear in more places in Castile. Medicine was taught at the University of Salamanca from 1254 but, as with the later University of Lisbon, very little is known about what was taught in this initial period (69).

(67) GARCÍA-BALLESTER (1984), note 65, pp. 41-42.

(68) GARCÍA-BALLESTER (1984), note 65, p. 52.

(69) GARCÍA-BALLESTER (1984), note 65, pp. 57-53. Another issue is the attendance of Portuguese students at Salamanca: see SERRAO, Joaquim Veríssimo. *La Universidad de Salamanca y Portugal hasta el Renacimiento. In: Estudios sobre la cultura portuguesa actual y un prólogo retrospectivo*, Salamanca, Universidad de Salamanca, 1973, pp. 7-15. A Portuguese cleric, Fernando Anes de Portocarreiro, a contemporary of Giles of Santarém and Petrus Hispanus, played a key role in

Even based as it is on the chance survival of evidence (an important will, the book lists, and early-modern chronicles), it has been possible to show that there clearly was an interest in medical learning in medieval Portugal, particularly based around Santa Cruz de Coimbra. It would be unwise to dismiss this evidence. Medieval Portuguese history seems to be full of such scraps and tantalizing morsels and if such sources were to be dismissed, Portugal would have had no history. Not only does the evidence suggest that there were a number of individuals keenly interested in medicine in medieval Portugal, but it also parallels evidence from other parts of the Iberian Peninsula. This should be taken into consideration in future studies of medieval Portuguese physicians.

the foundation of Salamanca: see ANTUNES, José. Portugueses no processo histórico da fundação da Universidade de Salamanca. *Revista da História das Ideias*, 1990, 12, 19-53.