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William of Malmesbury: Medical Historian of the Crusades

J. Phillips

Book 5 of William of Malmesbury's *Gesta regum Anglorum* (hereafter *GR*), which describes the mostly forgotten crusade of Sigurd, co-king of Norway, in 1106/8-1110, contains a curious vignette from the emperor's sojourn in Constantinople:

In that same city his men began to die like flies, and he himself [Sigurd] thought out a remedy, making the survivors drink wine more sparingly, and not unless mixed with water. Such was his penetrating intelligence: he put a pig's liver into the unmixed wine, and finding it soon dissolve away in the harsh liquor, he first foretold that the same thing would happen in the human body and then obtained visual confirmation by post-mortem examination of one who had died.¹

Although at first one might pass over this passage as a curious oddity, the fact that it is only found in William's text encourages closer examination. Sigurd's crusade is mentioned – very briefly – by only two other Latin chroniclers, Albert of Aachen and Fulcher of Chartres, but this episode is absent from their histories.² Moreover, it is not described in the vernacular sagas that record Sigurd's crusade in detail; these concentrate instead on Sigurd's good relations with the Byzantine Emperor, Alexios Komnenos.³ Sigurd's crusade has been mostly forgotten since its military impact was fairly limited, and indeed William does not dwell on Sigurd's sieges of Tyre and Sidon. How and why, then, did this episode make its way into William's text, and how should we interpret it? If we consider William as an historian of crusading, the twelfth-century medical context in which he wrote, and his other discussions of medical incidents occurring during the crusades, we will see that he was a chronicler with a very keen interest in medical experiences, whose discussion of them could contain subtleties relating to the importance of leadership, place, and the crusading endeavour.

William has been somewhat overlooked as an historian of the crusades because of the relatively late date of the composition of the *GR* in relation to other narratives of the First Crusade, and William's reliance on other written sources.⁴ However, recent trends in the study of medieval chroniclers, including those narrating the crusades, suggest that these reasons for excluding William from crusading scholarship are no longer valid, if indeed they ever were. If we do not search for 'truth' but rather look to the chronicler's representations of

events then there is much to be discovered in the subtext of their writing, especially regarding matters of health.⁵ Some background to William's interest in crusading is apposite. His account of the First Crusade (1095-99) and details of the early history of Outremer occupy most of book 4 of the *GR*.⁶ William also briefly comments on the participation of Edgar the Ætheling in the crusade of 1101, and, as mentioned, he describes the crusade of Sigurd of Norway.⁷ William's sources of information on the crusades have been detailed by Rod Thomson. Fulcher of Chartres's *Historia Hierosolimitana*, in two redactions, formed the basis of William's account of the First Crusade. He added material from Bernard the Monk's *Itinerary*, the anonymous *Gesta Francorum*, a version of the canons of the Council of Clermont and a now-lost *Itinerarium Urbis Romae*.⁸ Although English participation in the First Crusade was limited, William seems to have been acquainted with crusaders from the retinue of Eustace of Boulogne, perhaps because the counts of Boulogne held a substantial amount of land in England, and he may have heard their memories of events.⁹ These oral reports, and those of travellers who followed their compatriots to the Holy Land soon after the capture of Jerusalem in 1099, may explain why William's accounts of the post-crusade careers of Godfrey of Bouillon, his brother Baldwin, Raymond of Toulouse and Robert Curthose do not seem to be drawn from any other surviving written source.¹⁰

William tells us in the *GR* that he had studied medicine ('Physic, which cures the sick body, I went deeper into [than Logic]'), and his interest in health and the human condition is apparent throughout the text: the sick are a recurrent presence in his narrative of the First Crusade march through Italy, across the Balkan peninsula, and into Asia Minor. However, William's accounting of the experience of sickness does not tally exactly against the writing of other crusader authors.¹¹ For example, in his description of the siege of Antioch (1097-98) like most crusader authors, he describes food shortages, but unlike Albert of Aachen, Baudri of Dol and Gilo of Paris he makes no reference to an outbreak of plague, nor to the illnesses suffered by the crusader leaders Raymond of Toulouse, Godfrey of Bouillon, Adhémar of Le Puy and Stephen of Blois.¹² At the siege of Jerusalem in 1099, when most authors agree there was a dire shortage of water, William claims that there was no cause for concern, and that the only shortage of water was for the animals.¹³

Where William's interest in health and wellbeing becomes particularly evident is when he juxtaposes matters of health with discussions of geography. Describing the foundation of the city of Constantinople, he tells us that Emperor Constantine wished to build a city 'in a place where fertile soil and temperate climate conspired to make men healthy, for

being born in Britain he hated excessive heat.¹⁴ William's description of Antioch also highlights the salubrity of the city, where 'the Orontes [...] with its fast-flowing waters, made even colder by their headlong course, [...] carries with it an admixture of fresh air to ensure the health of the inhabitants.'¹⁵ Medieval medical theory relied on the Hippocratic concept that health was governed by four substances, or humours, within the body: blood, black bile, yellow bile, and phlegm. Illness was thought to be the result of imbalance of the humours, but it was thought that the humours could be kept in balance or restored to equilibrium through the careful management of environmental factors affecting the body.¹⁶ In humoral understandings of the body and health, geography and climate played an important role, and William's understanding of this is especially allied to the ideas presented in Hippocrates's *Airs, Waters, and Places*.¹⁷ This Greek medical treatise details how wind direction, water temperature, quality of sunlight and other environmental factors influence health. Each person, it was thought, had an individual balance of the four humours – his or her 'constitution' – which was largely a product of the environment in which they had grown up; William's reminder to his readers that Constantine was born in Britain subtly alludes to these ideas.

The degree to which *Airs, Waters, and Places* was known in the twelfth century is a subject of some debate but elements of the theories it contains are clearly detectable in William's work.¹⁸ Although we know that William studied medicine, we know neither where nor with whom, nor of what his medical reading consisted; neither is it possible to trace the medical ideas he references directly to specific medical authorities. His understanding could have developed as he absorbed a wide range of non-medical reading. One of the attractions of humoralism as a medical system was its simplicity; its basic concepts could be easily understood by the non-specialist, and medieval chronicles are suffused with references to humoralism and contemporary medical theory.¹⁹ Like many other twelfth-century authors, William does not dwell on the complexities of humoral imbalance or environmental conditions; rather, the experience of health and an understanding of contemporary medical theory are intrinsic factors of his perception of the world and these are incorporated into his wider discussions of political and military events.

The humoral understanding of health and place propagated the idea that peoples from different climates had different physical characteristics, and this idea is clearly articulated in the *GR*. In William's retelling of Pope Urban II's speech calling the First Crusade in November 1095, the pope assured his listeners of their natural advantages over their projected enemies:

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It is in fact well known that every nation born in an Eastern clime is dried up by the great heat of the sun; they may have more good sense, but they have less blood in their veins and that is why they flee from battle at close quarters: they know that they have no blood to spare. A people, on the other hand, whose origin is in the northern frosts and who are far removed from the sun's heat, are less rational but fight most readily, in proud reliance on a generous and exuberant supply of blood. You are a race originating in the more temperate regions of the world, men whose readiness to shed your blood leads to a contempt for death and wounds, though you are not without forethought; for you observe moderation in camp, and in the heat of battle you find room for reason.²⁰

William here describes the crusaders as physically different from their enemies from the East and even from their neighbours closer to home; the reference to peoples from the northern frosts presumably implies Scandinavians. This passage is a close paraphrase of Vegetius's *Epitoma rei militaris* on the warlike qualities of different peoples, which itself is drawn from Aristotle's *Politics*.²¹ The distinction between the East and the temperate regions is informed by the contemporary view of the world as divided into different climatic zones, whose inhabitants had intrinsically different physical qualities, through which William indicates that the crusaders were predisposed to victory.²² The borders William draws around the temperate regions seem to be rather fluid. His view of where England fits into this particular schema is particularly interesting, and is revealed in his infamous comment on the breadth of the appeal of the crusade: 'The time had come for the Welshman to give up hunting in his forests, the Scotsman forsook his familiar fleas, the Dane broke off his long drawn-out potatoes, the Norwegian left his diet of raw fish.'²³ The English are conspicuously absent from this barbed remark which describes their neighbours to the west, north and east, implying that William may instead wish to suggest that England, like continental Europe, was in the temperate zone. But he described Godfrey of Bouillon and Tancred's decision to stay in Jerusalem after the capture of the city in 1099 as a serious risk to their health, because they were 'heroes who from the cold of uttermost Europe plunged into the intolerable heat of the East [...]. Besides the fear of barbarian attacks, exposed to constant apprehension from the rigours of an unfamiliar climate [...] either the air they breathed would be loaded with pestilence, or they would be killed by the fury of the Saracens.'²⁴ Although these two leaders of the crusade came from rather different climates (eastern Germany, and southern Italy respectively), William classes them both as northerners relative to the Saracens. The importance William places on the relationship between geography and health is a manifestation of his strong sense of English self-identity as a native of the north and west of Europe.²⁵ William draws on

humouralism and contemporary understandings of geography to conceptualise the crusaders, a disparate group, as intrinsically united by their common origin in the temperate zone. In taking this approach he gives special prominence to the north and west of Europe – especially the English region, into which he draws Godfrey and Tancred – and allies the English with the crusaders from the temperate regions.

The logical extension of the medieval association between climate, place and health was that while some climates were naturally healthier than others (as seen in his description of Antioch), a person would always be healthiest in the climate where he or she had grown up and to which that person was acclimatised. Thus Godfrey and Tancred's decision to remain in the east really was a risk to their health. William's description of this decision conveys his view of the crusade as an expression of providential will: despite the danger to their health, Godfrey and Tancred, William records, trusted in God's protection.²⁶ William's panegyric biography of Godfrey, later the first Latin ruler of Jerusalem, expands on this theme, integrating issues of health, politics, kingship and crusading. In the narrative structure of William's biography of the duke, who claimed the 'place of honour' among the crusader leaders, according to William, Godfrey's experience of the crusade is framed, punctuated and determined by his health.²⁷ William describes how Godfrey was present at the siege of Rome by the Emperor Henry IV in 1084, but his interest in the siege is narrow.²⁸ Unconcerned here with military events – except to laud his hero by saying that Godfrey was the first to breach the walls – William instead relates how Godfrey's health was ruined by the siege: he contracted a fever, either from quenching his thirst from a barrel of poisoned wine found in a cellar during the battle for the city, or by the unhealthy mists arising from the Tiber.²⁹ In identifying the vapours of the river as one of the possible causes for Godfrey's illness, William makes reference to a common medieval theory of disease causation: the deleterious effects of the airs produced by unhealthy rivers or marshes. Air quality was thought to have a strong effect on the body, and certain types of air, particularly that arising from standing water such as marshes, were thought to be especially dangerous.³⁰

William has a teleological purpose in giving us such detail about Godfrey's fever, a 'febrim quartanum', which apparently caused him to lose his hair and nails: it directly led to Godfrey's assumption of the cross. According to William, the 'continual but slow fever' ('continuatae sed lentae febris') continued to affect Godfrey and the duke despaired of recovery. However, hearing the news of the planned expedition to Jerusalem, he swore

that he would go thither, if God in His mercy would grant him health. Having formulated this vow, he regained his strength to such a degree that, with his limbs renewed, upright and broad-chested, as though he had put years of decrepitude from him, he shone with new-created youth.³¹

With his hero now at the peak of health, William reinforced his presentation of Godfrey's physical resilience through a story describing his exemplary leadership: Godfrey came to the rescue of one of his knights who had been attacked by a lion while foraging at the siege of Antioch, and Godfrey dealt the animal a mortal blow with a hunting spear. The lion managed to wound Godfrey, but William leaves us to assume that the duke made an easy recovery.³² However, in other early twelfth-century versions of the story, Godfrey's encounter with the beast (in these cases, a bear) is recorded rather differently.³³ Gilo of Paris's crusade poem recounts how Godfrey was gravely wounded, but impressed those around him by continuing to command while confined to a litter.³⁴ Two other chroniclers, while ostensibly lauding Godfrey, imply a more complex story. Albert of Aachen says that Godfrey, coming to the rescue of a helpless pilgrim, was mauled by the bear and managed to injure himself, getting his legs entangled with his own sword and inflicting a deep wound on his thigh. The injury of their leader delayed Godfrey's contingent for some time and so through his self-inflicted injury, Godfrey is seen to fail in the role of military leader.³⁵ Guibert of Nogent's version is even more critical: he records that the duke had gone out in search of sport, but upon being bitten by a bear was injured so badly that his contingent was delayed and 15,000 men abandoned him. In this version, Godfrey's injury may not have been self-inflicted, but the consequences for his followers are serious.³⁶ In William's hands, though, Godfrey's accident became the daring rescue of one of his sworn men, the action of a model leader which in no way compromised his commitment to the crusade.

The respite from his chronic illness, which Godfrey enjoyed during the crusade, ended soon after the Battle of Ascalon in August 1099, the engagement that, after the capture of Jerusalem in July, secured the position of the nascent crusader settlement in the East. Apparently, during the lull in hostilities at the end of 1099, Godfrey 'had an attack of his old fever as a result of this unwonted leisure'.³⁷ Once again, Providence had a hand in this: William explains that it was God's will to take His servant to Him, and so Godfrey died in July 1100.³⁸ Throughout his highly selective biography of the duke, William consistently uses Godfrey's health as an instrument of Providence. By describing Godfrey's recovery from health for the sole purpose of gloriously fighting in the crusade and securing the kingdom of Jerusalem in its precarious early days as an act of God, William reflects broader

contemporary interpretations of the crusaders as implements of God's will, according to which Godfrey's health, furnished by God, directed to the crusade and took him to Paradise when the crusade was over.

Let us return then to William's story of Sigurd's crusade, and to the health problems of the Norwegian crusaders in Constantinople. This vignette could be interpreted through a modern, scientific lens as a case of alcohol poisoning as a result of overindulgence in the local beverage.³⁹ To draw this conclusion, however, would be to enter the disputed ground of retrospective diagnosis.⁴⁰ Alternatively, we can enter William's conceptual world, and to place this passage in the context of his understanding of humoral and climatic theory, his interpretation of the crusade, and his views of different nations and peoples. It should be noted that in twelfth-century medical opinion, wine was considered to be very healthy, being humorally warm and dry, able to balance the humours and strengthen the body when drunk in moderation: excess of anything was considered unhealthy, and too much wine was thought to over-heat the body.⁴¹ Considering the medieval medical theories of the adaptation of people to their climatic surroundings, which, as discussed, were important to William, it follows that he would have thought that wine produced in a foreign place could be unhealthy for visitors. Perhaps the problem was not simply that the Norwegians drank too much wine, but that the wine was of the wrong origin and did not suit their constitutions. Moreover, contemporary medical advice was to mix wine with water in order to manage its effect on the body. The mixing of water and wine for medical purposes could be complex, depending on the specific ailment, time of year and type of wine, but it was also usual to dilute wine for ordinary drinking.⁴² Sigurd's advice to his men – to dilute their wine – dates to ancient Greek times, and was considered important for the healthy consumption of wine until the early modern period.

More puzzling is William's report that the body of a dead soldier was examined to discover the cause of his death. The implication from the prominence of the liver in Sigurd's diagnosis is that Sigurd had the man dissected, although William's language is not explicit. It would be extremely unusual if autopsy, the dissection of a body to determine cause of death, were implied, since this practice was virtually unknown in Western Europe before the fourteenth century. A handful of stories of autopsies were recorded in Byzantium in the eleventh and twelfth centuries, although the veracity of the incidents described is questionable, and the first known autopsy in Italy was not until 1286.⁴³ It is, however, possible that the concept or idea of autopsy for medical diagnosis, if not the physical practice,

was known in twelfth-century Byzantium, and this provides a rationale for the inclusion of the story in William's chronicle, given that the event described apparently took place in Constantinople; he may have been prepared to accept the report of such an unusual procedure, given that it took place in an alien land. William gives no indication of shock or surprise at the concept of an autopsy, which ought to have been unfamiliar to him. Perhaps he would have been inclined to accept it as a manifestation of the alterity he already perceived in the toxicity of the local wine to the crusaders and the implied insalubrity of the location.

How does William's inclusion of this story fit in with his interpretation of the crusade? Not only does it represent his interest in health, place and illness, but it is also an opportunity for him to reinforce his presentation of the ideal crusader leader. The role of Providence is less obvious here than in his biography of Godfrey; the solution to the problem of the wine is attributed solely to Sigurd himself without any divine assistance. However, there is some corroboration between the depictions of the two men: William's description of Sigurd as learned and wise, concerned above all for the condition of his men, parallels William's story of Godfrey and the lion, in which Godfrey responded to the danger of one of his knights. William thus emphasises that a crusading leader should be constantly attentive to the health and wellbeing of his men.

William's evidently sophisticated level of medical understanding tells us much about how health and crusading were interpreted in the twelfth century, and about William himself. To claim that William was not an historian of crusading would be to miss how his interpretation of the crusading endeavour is shown through his discussion of matters of health, and what this represents of contemporary attitudes to the crusade. The representations of health in the crusading sections of the *GR* allow us to appreciate the wealth of contemporary medical insight that these parts of the text convey. The experience of health is integrated into William's political, military, and biographical narrative of early twelfth-century crusading, and this integration shows that he was interested in more than the politico-military significance of the events he describes, rather interpreting the health of crusaders in terms of place and geography. Perhaps this is actually a manifestation of William's own strong sense of self-identity as a writer on the periphery of Europe, which leads him to demonstrate that crusading in the East could be a risky endeavour for northerners and westerners. William's prevailing message, however, is that those crusaders who suffered

from the health risks of crusading could be preserved by Divine Providence, the crusade being, of course, the *gesta Dei per Francos*.

¹ ‘Hominibus suis in eadem urbe cateruatim morientibus remedium excogitavit, ut reliqui parcius et aqua mixtum uinum biberent, ingenti ingenii acrimonia ut, porcino iecore mero iniecto moxque pro asperitate liquoris resoluto, idem in hominibus fieri primo presagerit, post etiam quodam defuncto extinterato uisi addisceret’: *GR* c. 410. 3. I am grateful to Rod Thomson for bringing this passage to my attention.

² Albert of Aachen, *Historia Ierosolimitana*, ed. and trans. S. Edgington (OMT 2007), pp. 799–809; Fulcher of Chartres, *Historia Hierosolymitana*, ed. H. Hagenmeyer (Heidelberg, 1913), bk. 2. 44 (pp. 543–8).

³ The sagas which describe Sigurd’s journey are: *Morkinskinna*, ed. T. M. Andersson and K. E. Gade (Ithaca, NY, 2000), pp. 322–5; *Fagrskinna*, ed. A. Finlay (Leiden, 2004), pp. 256–7; *Ágrip af Nóregskonungaşogum*, ed. and trans. M. J. Driscoll (2nd edn., London, 2008), pp. 73–5; Snorri Sturluson, *Magnússona Saga*, in *Heimskringla: History of the Kings of Norway*, trans. L. M. Hollander (Austin, TEXAS, 1964), sec. 1–13 (pp. 689–99).

⁴ R. M. Thomson, ‘William of Malmesbury, historian of crusade’, *Reading Medieval Studies* 23 (1997), 121–34, at 122, revised version in his *William of Malmesbury*, ch. 10.

⁵ In utilising this approach, this paper is influenced by the ways in which the central premises of the so-called ‘linguistic turn’ have been taken up by historians working on medieval chronicles. Of particular relevance to this paper, see especially M. Bull, ‘Narratological readings of crusade texts’, in *The Crusader World*, ed. A. Boas (London, 2016), pp. 646–60 which proposes a methodology for studying crusader narrative texts regardless of whether they represent authentic histories or not. On the representation of health and illness in medieval chronicles, I. McCleery, ‘Medical “emplotment” and plotting medicine: health and disease in late medieval Portuguese chronicles’, *Social History of Medicine* 24 (2011), 125–

41. See also S. Menache, 'Chronicles and historiography: the interrelationship of fact and fiction', *JMH* 32 (2006), 333–45.

⁶ *GR* cc. 343–707.

⁷ *GR* cc. 251. 2-3, 410.

⁸ Thomson concludes that although William's account was similar to that of Orderic Vitalis in the *Historia Ecclesiastica*, there is nothing to suggest that their work was interdependent: Thomson, 'Historian of crusade', p. 123.

⁹ William states that some of the men who fell at the battle of as-Sinnabrah (28 June 1113) were known to him personally: *GR*, c. 385. 1, an episode analysed in A. V. Murray, 'A little-known member of the royal family of crusader Jerusalem in William of Malmesbury's *Gesta Regum Anglorum*', *Notes and Queries*, n.s. 43 (1996), 397–99, at 399, and *GR* II, p. 342.

¹⁰ Thomson, 'Historian of Crusade', pp. 123–4.

¹¹ 'physicam, quae medetur ualitudini corporum, aliquanto pressius concepi': *GR* bk. 2. prol.

1. For references to the sick, *GR* cc. 353. 2-3, 357. 6.

¹² Raymond of Aguilers records the illnesses of Godfrey of Bouillon and Raymond of Toulouse: *Historia Francorum*, in *RHC Occ.*, 5 vols. (Paris, 1866), III, pp. 231–309, at 243, 259; Raymond of Toulouse's illness is also mentioned by Gilo of Paris, *Historia Vie*, bk. &: lines 372-3, ed. and trans. C. W. Grocock and E. Siberry (OMT 1997), p. 184. Stephen's illness is acknowledged in Albert of Aachen, bk 4: 13 (pp. 266–8); Baudri of Bourgueil, *Historiae Hierosolymitana*, bk. 3: 12, in *RHC Occ.*, 5 vols. (Paris, 1879), IV, p. 71; Peter Tudebode, *Historia de Hierosolymitano Itinere*, c. 61, in *RHC Occ.* III, p. 203. Adhémar's death is widely attested, although only linked to a widespread epidemic by Albert of Aachen in bk 5: 4 (p. 342).

¹³ *GR* c. 369. 2.

¹⁴ ‘ut illic urbem diuino iussu fundaret ubi et soli uertas et caeli temperies mortalium saluti coneunerit; quia enim in Britannia natus fuerat, ardores solis exosus erat.’ *GR* c. 355. 2.

¹⁵ ‘Orontem [...] fluentis rapacibus et ipso impetu frigidioribus salubris aurae temperie saluti medetur ciuicae’: *GR* c. 359. 1.

¹⁶ For more on the system of humoralism, see V. Nutton, ‘Humoralism’, in *Companion Encyclopedia of the History of Medicine*, ed. W. F. Bynum and R. Porter, (2 vols, London, 1993), I, pp. 281–91.

¹⁷ *Airs, Waters, Places*, in *Hippocratic Writings*, ed. G. E. R. Lloyd, trans. J. Chadwick and W. N. Mann (Harmondsworth, 1978), pp. 148–69.

¹⁸ The debate is summarised in S. Cavallo and T. Storey, *Healthy Living in Late Renaissance Italy* (Oxford, 2013), p. 78. While the text itself may not have been known, a commentary by Galen may have been. We ought perhaps to look for an indirect transmission of its central ideas, as suggested by P. Biller, ‘Proto-racial thought in medieval science’, in *The Origins of Racism in the West*, ed. M. Eliav-Feldon, B. H. Isaac, and J. Ziegler (Cambridge, 2009), pp. 157–80, at 162–3, and R. Bartlett, *Gerald of Wales: A Voice of the Middle Ages* (Stroud, 2006), p. 148.

¹⁹ As Thomson and Winterbottom (*GR* II, p. 305, nn. to c. 347. 8–9) note, the dependence of character on climate (and presumably the corollary that health depended on environment) was an assumed fact in the twelfth century, and an idea that would have been very familiar to William.

²⁰ ‘Constat profecto quod omnis natio quae in Eoa plaga nascitur, nimio solis ardore siccata, amplius quidem sapit, sed minus habet sanguinis; ideoque uicinam pugnam fugiunt, quia parum sanguinis se habere norunt. Contra, populus qui oritur in Arctois pruinis, et remotus est a solis ardoribus, inconsultior quidem sed largo et luxurianti superbus sanguine promptissime pugnat. Vos estis gens quae in temperatioribus mundi prouintiis oriunda, qui

sitis careatis prudentia; namque et modestiam seruatis in castris, et in dimicatione utmini consiliis.’ *GR* c. 347. 8.

²¹ Vegetius, *Epitome of Military Science*, trans. by N. P. Milner (Liverpool, 1993), bk. 1:2, (pp. 3-4), esp. n. 5 to p. 3; *Epitoma rei militaris*, ed. by M. D. Reeve (Oxford, 2004), bk. 1:2 (pp. 6-7); Aristotle, *Politics*, trans. by C.D.C. Reeve (Indianapolis, 1998), bk. 7:7 (p.202). On William’s familiarity with Vegetius, R. M. Thomson, ‘The reading of William of Malmesbury’, *Revue Bénédictine*, 85 (1975), 362–402 (p. 379). My thanks to James Titterton for pointing out the debt this passage of the *GR* owes to Vegetius.

²² For more on contemporary understandings of geography and ethnography, see I. Metzler, ‘Perceptions of hot climate in medieval cosmography and travel literature’, *Reading Medieval Studies* 23 (1997), 69–105; Biller, ‘Proto-racial thought’; and, for a particularly twelfth-century perspective, Bartlett, *Gerald of Wales*, pp. 147–8, 164–71.

²³ ‘Tunc Walensis uenationem saltuum, tunc Scottus familiaritatem pulicum, tunc Danus continuationem potuum, tunc Noricus cruditatem reliquit piscium’: *GR* c. 348. 2.

²⁴ ‘uiri qui ab extremo Europae frigore in importabiles se Orientis calores immerserint [...] ‘qui preter metum barbaricorum incursum semper pro incommoditate ignoti poli suspecti [...] non dubitarent subsistere ubi uel pestifero afflarentur aere uel Saraceni occiderentur rabie.’ *GR* c. 372. 1.

²⁵ William’s sense of self-identity, most evident from a political and cultural perspective, has been explored by, *inter alia*, J. Gillingham, ‘The beginnings of English imperialism’, *Journal of Historical Sociology* 5 (1992), 392–409, at 394-95, repr. in his *The English in the Twelfth Century* (Woodbridge, 2000), pp. 1-18, at pp. 5-6, and chapter 1 of K. A. Fenton, *Gender, Nation and Conquest in the Works of William of Malmesbury* (Woodbridge, 2008).

²⁶ *GR* c. 372. 2.

²⁷ *GR* c. 373. William's clear partiality towards Godfrey may be as much a manifestation of the fact that Godfrey assumed a semi-mythical status as the ideal crusader soon after his death, later being counted among the Nine Worthies, as of William's good relations with Empress Matilda and her half-brother Robert of Gloucester; Godfrey was in imperial vassal. Although William strove to remain impartial, he acknowledged the difficulties of doing so as an historian: *GR* bk. 4 prol.

²⁸ Godfrey was probably not actually present at this siege: A. V. Murray, *The Crusader Kingdom of Jerusalem: A Dynastic History, 1099-1125* (Oxford, 2000), p. 25. However, Albert of Aachen also assumes his presence: bk. 5: 13 (pp. 354–5).

²⁹ *GR*, c. 373. 3-4. Exactly why the wine should have been poisoned is not explained.

³⁰ C. Rawcliffe, *Urban Bodies: Communal Health in Late Medieval English Towns and Cities* (Woodbridge, 2013), pp. 120–2; P. Horden, 'Disease, dragons and saints: the management of epidemics in the Dark Ages', in *Epidemics and Ideas: Essays on the Historical Perception of Pestilence*, ed. T. O. Ranger and P. Slack (Cambridge, 1992), pp. 45-76, at 71.

³¹ 'illuc se iturum uouit, si Deus propter ei salutem largiretur; quo uoto emisso ita ducis uires refloruisset ut nodosos integer artus et spatioso erectus pectore, quasi squalentibus annis exutus, recenti emicaret iuuenta.' *GR* c. 373. 4-5.

³² *GR* c. 373. 6.

³³ For a detailed examination of this event, see Natasha Hodgson, 'Lions, Tigers, and Bears: Encounters with Wild Animals and Bestial Imagery in the Context of Crusading to the Latin East', *Viator*, 44.1 (2013), 65–93 (pp. 84–93).

³⁴ Gilo of Paris, bk. 4, ll. 390–99 (pp. 94–5).

³⁵ Albert of Aachen, bk. 3: 4–5 (pp. 144–5).

³⁶ Guibert of Nogent, *Gesta Dei per Francos*, 7: 12, ed R. B. C. Huygens (Turnhout, 1996), pp. 285–7.

³⁷ ‘regem otii desuetudine febrim antiquam nactum fuisse’: *GR* c. 373. 7. By this stage, Godfrey was king of Jerusalem, according to William, although whether he actually took that title is disputed.

³⁸ *GR* c. 373. 7-8.

³⁹ *GR* II, p. 374.

⁴⁰ On retrospective diagnosis, the practice of diagnosing medical conditions in the past, see J. Arrizabalaga, ‘Problematizing retrospective diagnosis in the history of disease’, *Asclepio* 54 (2002), 51–70; A. Cunningham, ‘Identifying disease in the past: cutting the Gordian Knot’, *Asclepio* 54 (2002), 13–34; P. D. Mitchell, ‘Retrospective diagnosis, and the use of historical texts for investigating disease in the past’, *International Journal of Paleopathology* 1 (2011), 81–8.

⁴¹ M. W. Adamson, *Food in Medieval Times* (Westport, CT, 2004), p. 51; Cavallo and Storey, *Healthy Living*, pp. 218–20.

⁴² J. Jouanna, *Greek Medicine from Hippocrates to Galen: Selected Papers* (Leiden, 2012), pp. 188–9. See also note 40 above.

⁴³ L. J. Bliquez and A. Kazhdan, ‘Four testimonia to human dissection in Byzantine times’, *Bulletin of the History of Medicine* 58 (1984), 554–7; R. Browning, ‘A further testimony to human dissection in the Byzantine world’, *Bulletin of the History of Medicine* 59 (1985), 518–20; but see the important qualifications raised by V. Nutton and C. Nutton, ‘The archer of Meudon: a curious absence of continuity in the history of medicine’, *Journal of the History of Medicine and Allied Sciences* 58 (2003), 401–27, at 404–5, n. 10. On the date of the first Italian autopsy, K. Park, ‘The criminal and the saintly body: autopsy and dissection in Renaissance Italy’, *Renaissance Quarterly* 47 (1994), 1–33, at 4.