The lexicon of pulmonary ailment in some medieval Irish medical texts*

Résumé

Le terme loch tuile ne se trouve pas dans les sources lexicographiques qui ont été publiées jusqu'à présent pour les langues gaéliques. Il est utilisé, cependant, pour faire référence à la maladie pulmonaire dans des manuscrits médicaux irlandais copiés pendant les quinzième et seizième siècles, dans un cas comme glose interlinéaire sur le texte juridique en vieil-irlandais connu sous le nom de Bretha Déin Chécht ('Les jugements [du médecin mythologique] Dían Cécht'). Il s'agit dans cet article d'examiner quelques attestations de ce terme et de ses dérivés, en faisant appel à textes qui se trouvent dans quatre manuscrits différents. La discussion vise alors à élucider quelques aspects de la terminologie médicale gaélique pendant l'époque médiévale, et aussi à faire des observations préliminaires sur les liens qui auraient existé entre les manuscrits en question.

Introduction

The term *loch tuile* is not recorded in published lexicographical sources for the Irish language, but is used to refer to pulmonary ailment in Irish medical manuscripts copied during the fifteenth and sixteenth centuries, in one case occurring as an interlinear gloss on the Old Irish legal text known as *Bretha Déin Chécht* ('The judgements of the [mythological physician] Dían Cécht'). This contribution will examine some attestations of this term and its derivatives from the corpus of unpublished Irish medical tracts, with the dual aim of shedding further light on the technical terminology of medieval Irish medicine, and of offering some preliminary observations regarding the relationship between texts extant in four separate medical manuscripts.

^{*} Much of the work for this article was undertaken as part of the project *Medieval Irish medicine in its north-western European context: a case study of two unpublished texts* (MIMNEC), funded by a Laureate Award from the Irish Research Council (Grant agreement no. IRCLA/2017/57). I am grateful to David Stifter, Jürgen Uhlich and an anonymous reader for suggesting many important improvements to an earlier draft. I alone am responsible for any errors or shortcomings that might remain.

Text 1: a medical catechism

The first text to be examined in this study survives in a single manuscript witness occupying five folia (59r-64r) in the fourth section of National Library of Scotland, Advocates' MS 72.1.2 ('Gaelic II'), a codex compiled during the sixteenth and seventeenth centuries by the Mull branch of the famous Beaton family of medical practitioners.1 It consists of a collection of questions and answers on fairly practical medical topics that clearly draws on elements of standard classical medical doctrine, but is written in a terse, pedagogical style and contains no explicit references to any particular scientific authorities. The sequence of questions and answers in this "medical catechism" broadly follows the head-to-toe ordering typical of medical compendia compiled throughout the medieval and early modern periods. Many questions focus specifically on anatomical matters, and are primarily concerned with describing parts of the body to which injury was considered to be particularly perilous.² However, a number of other sections do not fit neatly into this thematic scheme, such as those which contain lists of various diseases and their properties, concise anatomical explanations for eye and ear complaints, and advice on the proper way to go about bathing in order to prevent certain illnesses.

Diseases and their properties are treated in the first two sections of the catechism, where it is stated that one ought to know what ailments are caused by heat and moisture, respectively. This is followed, in turn, by a succinct enumeration of various types of 'hot' and 'cold' diseases:

Is fisidh ca fada is slān an duine.

Nī ansa. In ærad is comhtrom a theasaideacht 7 a fhlithaigacht, ūair is īad sin uimuilnges a slānte 7 eslānti an c[h]uirp dænna. Madh dā 3 t[h]easaidhacht vero bus trēn, is īad so gallra do-nī .i. lubhra 7 aillsi, loch tuile 7 galor fūail, leac 7 dærgalor, cær 7 rūad. Madh dā fhūarrighacht vero bus tr[ē]n, is idha

¹ For the most recent catalogue description of this manuscript (by Ronald Black), see the entry for NLS MS 72.1.2 on the *Irish script on screen* project website (<www.isos. dias.ie>). On the Beaton physicians, see BANNERMAN 1986.

On the head-to-toe structuring of medical texts, see for example CAMERON 1993: 36 and DEMAITRE 2013. For discussion of the technical terminology and anatomical theme of the medical catechism, see HAYDEN 2014 and 2016.

³ On this tautological construction, see *eDIL*, *s.vv.* 1 día n- and 3 má (ma) IV, as well as SnG 281 (§11.11), where it is noted that in Middle Irish, the conjunction má 'if' + copula -d combined with dá (dia) plus nasalisation often takes the place of má followed by the subjunctive. Here, however, the word dá itself seems to include or imply the copula, as in both cases the construction is followed by a noun; I have not yet identified any parallels for this in other sources, including whether a following lenition (as seen in the second instance below and accordingly supplied here) is regularly to be expected in this particular environment.

do-nī sin, 7 is īad so a hanmanda .i. cein nidha 7 dēididha, lōinidha 7 galor gaile, raipidha 7 idha ēiccneach 7 idha adbach crāmha⁴ [...]

It is worth knowing for how long a person is healthy.

Not difficult – so long as his heat and moisture are evenly balanced, since it is those which cause health and illness in the human body. If it be heat that is intense, these are the diseases that it causes, i.e. leprosy⁵ and tumour, *loch*

⁴ The precise condition designated by this last phrase is unclear. The term *adbach* is cited in commentary to the early Irish legal text Di astud chor ('on the binding of contracts') concerning diseases affecting livestock, where it appears to be a noun referring to some kind of disease affecting cattle, and is glossed by the word marblaogh 'dead-calf'. According to McLeod (1992: 314-15), this could indicate that it was a disease that caused the death of young calves (e.g. salmonellosis or calf diphtheria), or resulted in their still-birth (e.g. brucellosis). In *eDIL* the term *adbach* appears to be equated with odbach, the latter of which is defined (s.v. 1 odbach) as an adjective (from odb 'lump, swelling') meaning 'knotty' or 'knobby'. However, the dictionary entry under 2 odbach demonstrates that the adjective was also used substantivally to refer to a 'name of a disease (boils or someth[ing] similar?)', and the aforementioned legal commentary on diseases of livestock clearly suggests that adbach and odbach had, at least at some point, come to be understood as distinct conditions: whereas adbach is glossed with marblaogh, odbach is defined by the commentator by the words .i. in dubúar. McLeod (1992: 323) suggests that the latter refers to 'cattle-plague': he states that 'both headword [odbach] and gloss [dubúar] point to "black-quarter", a cattle disease characterised by swellings in muscled areas with the overlying skin becoming dark and parchment like'. The text presented here, however (where the disease in question is clearly one affecting humans), appears to use adbach as an adjective modifying the noun *idha* and followed by another noun in the genitive case; I have therefore interpreted it as an equivalent of the adjective listed in eDIL, s.v. 1 odbach. The cr- in crámha suggests both a northerly locale and a relatively late date for the composition or copying of the passage; thus O'RAHILLY (1932: 22-3) notes that the dialectal substitution of *cr*- for *cn*- is only rarely attested in writing before the late sixteenth century, and is mainly characteristic of Ulster Irish, Scottish Gaelic and Manx. Historically, the form crámha could either be a genitive singular of the i-stem noun cnáim 'bone' or of the u-stem noun cnám 'act of gnawing, wasting' (see eDIL s.vv.). Here I have tentatively taken it to be the former, on the basis that classical medical sources state that excess cold was inimical to the bones because it causes constriction in the body, resulting in conditions such as tremor and spasm (see further the discussion below, pp. 111–112). Indeed, this could be the meaning implied by the adjective adbach, if it is in fact equivalent here to odbach in the sense of 'knotty' or 'knobby' – i.e. as a reference to the small, bump-like areas of muscle that occur when muscle fibres or the bands of tissue underneath them tense or tighten. It is possible that muscle tension of this kind would have been associated with the bones of the body.

⁵ On the translation of the term *lubhra* as 'leprosy' in this context, see further the discussion below, pp. 109–110.

tuile and urinary disease, *lecc* and haemorrhoids, *cáer* and *rúad*. If it be cold that is intense, that causes a sharp pain (*idha*), and these are its names, i.e. headache and toothache, sciatica and a sickness of the stomach, intestinal pain⁶ and violent pain and knotty pain of a bone (?) [...].⁷

The opening of this passage alludes to a basic tenet of Aristotelian natural philosophy, which held that all living compounds – composed of the four elements (fire, air, water, and earth) – depend on a balanced coexistence of warmth and moisture. Too much heat in the body would result in death by withering and 'burning up', while too little warmth would allow moisture to lead to decay by 'putrefaction' or rotting. Galenic physiology subsequently assigned a more prominent role to this dichotomy between 'innate' or 'natural' heat and so-called 'radical moisture' by associating the elemental qualities with the Hippocratic doctrine of the four humours, e.g. defining choler as 'dry and warm' and phlegm as 'moist and cold'.⁸ An imbalance of the four humours (*dyscrasia*) was thought to be the direct cause of all diseases, while the qualities of each humour influenced the nature of the diseases to which it gave rise; for example, fever was seen to be the result of abnormal heat emanating from the heart.⁹

Those afflictions that are defined in the Irish catechism as 'cold' diseases are described as being, for the most part, various types of *idha* ('cramp' or 'pangs'), such as headache, toothache, sciatica (*lōinidha*, lit. 'a pain in the loins'), and intestinal pain. Conversely, excess heat in the body is associated with a number of medical terms for which *eDIL* offers only vague or ambiguous definitions. For example, the word *aillse*, which is often used to translate Latin *cancer* in Irish medical texts, is variously defined in the historical dictionary (s.v. *aillsiu*) as a 'sore', 'tumour' or 'abcess'. Similarly, it is unclear precisely what ailment is denoted by the words *lecc* and *cáer*. The basic definition given for the former term in both Old Irish and Modern Irish sources (see e.g. *eDIL* s.v. *lecc* and Ó Dónaill 1977 s.v. *leac*) is a 'flat slab of rock or stone; flagstone'. *eDIL* also gives two examples in which the word appears to be used in a medical

⁶ I take this word to be a compound of *idha* 'pain' and the word listed in *eDIL s.v. 2 robb*. The dictionary offers the primary definition of 'a body' for the latter, but some of the citations given in support of this definition indicate that it refers more specifically to the abdominal region. For example, the compounds *findrop* and *dubrop* are used in medical texts to refer to the small and large intestine respectively (MEYER 1921).

NLS MS 72.1.2, fol. 59r1–12. In this and the following citations from unedited texts, capitalisation of words in the manuscript has been retained, while expansions are indicated by italics, and length-marks, where not found in the manuscript, have been supplied using a macron over vowels. Word-division and punctuation are editorial. Emendations designed to improve either the sense or the form of the text are discussed in the footnotes. Translations, unless otherwise indicated, are my own.

⁸ Demaitre 2007: 105.

⁹ Lindberg 2007: 336.

context: namely *lecc ós crú* (lit. 'stone over hoof'), which is cited as the name of a defect in horses (Ó Cuív 1952: 52–3), and *lecc in árain* 'a stone in the kidney'. In the latter example, the word glosses Latin *lapi[s] fulta* (Stokes 1860: 9). According to *eDIL* (s.v.), the term *cáer* refers to a 'a globular mass in a variety of applications', perhaps something resembling a 'berry' (cf. Mod. Ir. *caor*). The word *rúad* is attested in *eDIL* only as an adjective meaning '(brownish or dark) red', and not as a designation for any particular disease or condition; however, lexicographical sources for the later language suggest that both this adjectival form and the related abstract noun *ruaidhe* came to be used substantivally to denote the condition known as 'the rose' or 'erysipelas' – an acute infection, usually with skin rash, that could occur on the legs, toes, face, arms or fingers. The stone of the later and the legs, toes, face, arms or fingers.

The ambiguous nature of the definitions given in *eDIL* for the various conditions listed in the first section of the medical catechism illustrates the difficulty of translating terms for particular diseases or bodily afflictions on the basis of citations drawn from some types of early Irish sources, such as annals or narrative texts, in which references to a given affliction may be decontexualized or imprecise. 12 It also reflects the fact that the premodern understanding and classification of many ailments often do not map easily onto a modern nosological framework, since prior to the advent of modern medicine, diseases were conceived of as qualitative conditions rather than pathological entities. 13 This can be readily illustrated by the term *lubhra*, which is included in the list of 'hot' diseases from the catechism in the excerpt cited above. In eDIL (s.v. lobrae), the word is translated as 'weakness', 'infirmity' or 'sickness', while the related adjective *lobur* is defined in the same source as both 'weak, infirm, ...' and, when used substantivally, as 'one who is afflicted with some skin disease'. The latter definition is reflected in entries from dictionaries of Modern Irish, which give the more specific meaning of 'leprosy' for the noun.¹⁴ In one citation from *eDIL*, Irish *lubra* glosses the Latin term *lepra*, from which English 'leprosy' is derived, although the Irish and Latin terms are not etymologically related. 15

¹⁰ For further comments on the meaning of this term, see Scott 1981.

¹¹ See, for example, Ó DÓNAILL 1977, s.v. rua², and DINNEEN 1904, s.v. ruaidhe. DWELLY (1911) gives 'erysipelas' under both ruadh and ruaidhe, but also records the meanings 'nettle-rash' and 'herpes, shingles' for the latter. Mackenzie (1895: 53–5) records several charms to cure ruaidhe from Scottish Gaelic sources; he describes the condition as a 'rash' or 'a swelling of the breast of a woman or the udder of an animal, causing retention of the milk, and consequent pain'.

For an illustration of the difficulties involved in interpreting the names of diseases in the Irish annals, see MACARTHUR 1949.

¹³ Demaitre 2013: 21.

¹⁴ See e.g. DINNEEN 1904, s.vv. lobhra and lubhra, and Ó Dónaill 1977, s.v. lobhra.

¹⁵ The gloss in question occurs in Stokes 1860: 10, no. 268. The adjective *lobor* is evidently derived from Latin *lepra* in *Sanas Cormaic* on the basis of the formal similarities of the two terms, which may help to explain their association in other sources

The early association of the Irish terms lubra and lobor with Latin lepra, as well as the ambiguity surrounding the definition of both of these words, may have arisen in part from the fact that references to 'leprosy' in premodern sources could denote a wide variety of mostly skin deformities that were not necessarily identical to what was identified in the nineteenth century as 'Hansen's Disease'. As Luke Demaitre has shown, the physical definition of *lepra* clearly understood it as a 'breakdown' or 'rotting' of the body that resulted from the spread of burned humours, but the terminology associated with the symptoms of the disease varied considerably over time. Indeed, medical compendia from the eleventh century onwards used the word *elephantia* to refer specifically to a condition in which thickening, cracking, roughness, and knobs made the skin resemble that of an elephant. By contrast, leonina designated the form of the disease characterised by a protuberant forehead, loss of eyebrows, and the collapse of the nostrils, making the face look like that of a lion, while scabies was understood as a skin infection characterised by an intolerable itch. 16 That these Latin terms were known to Irish physicians by at least the late-medieval period is evidenced by the fact that the thirteenth-century authority 'Gillibertinus' (Gilbertus Anglicus) is cited in an Irish tract on diseases as a source for the so-called 'twelve varieties' of leprosy. However, the terms used to designate each "type" of the disease appear in the Irish tract as transparent borrowings from Latin, occasionally adjusted to conform with the conventions of Irish orthography in representing Irish phonology: i.e. lepra, morfia, elafancia, leonia, tiria, allapisia, pusdule, sgaibies, erisipila, uariola, serpigo and mala mortum.¹⁷

It is clear, however, that the distinction between 'hot' and 'cold' afflictions introduced in the opening section of the medical catechism in NLS MS 72.1.2 broadly echoes the classification of diseases articulated by Galen in several of his writings, including a work known in the Middle Ages as *De morbo et accidenti*. This title in fact designated a compilation of four separate tracts – the *De differentiis morborum*, *De differentiis symptomatum*, *De causis morborum* and *De causis symptomatum* – which from the thirteenth century onwards came to form part of the so-called "new Galen", a collection of translations that made several of Galen's medical works available to a medieval audience for the first time, and played a central role in the medical curriculum of the early universities. ¹⁸ Galen states that 'there are two diseases of

⁽MEYER 1912: 71 [Y 840]: lobor quasi lebor, a lepra Latine). On the etymology of Old Irish lobur, see further the note by David Stifter in this volume.

¹⁶ Demaitre 2013: 102-4; see also Demaitre 2007: 75-102.

¹⁷ NLS MS 72.1.2, fol. 118v22-8; cf. BL MS Arundel 333, fol. 14v17-20 and TCD MS 1343 [H 3. 22], p. 111.17-20. On the evidence for leprosy in Irish sources, see also MacArthur 1949: 186-8; Crawford 2011: 60-5; and Paton 2014.

¹⁸ O'Boyle 1998: 6-7; for a translation of the four treatises in question, see Johnston 2006. On the introduction of the "new Galen" into the medieval university curriculum, see especially GARCÍA-BALLESTER 1982 and 1998.

homoiomeric19 bodies arising in an imbalance of pores, one a dilatation and the other a constriction [...] Of constriction there is either a collapse of a body into itself from all sides or an obstruction of the pores themselves, whereas of a dilatation there is either an outward movement into every part of the body or a kind of expansion of the pores themselves through a falling away of the elements'. To the latter category (i.e. diseases characterised by dilatation) Galen assigns conditions such as erysipelata, inflammatory swellings (phlegmonai), tumours (phumata), glandular swellings (phugethla), scrofulous swellings (choirades), leprai, and indurations (skirroi), among others. Johnston has noted that, although the meaning of many of these terms varied over time, they clearly 'all represent conditions in which there are visible superficial changes affecting the skin or immediately subcutaneous structures, these changes being attributed to inflowing material'.20 Despite the ambiguity of the translations offered in *eDIL* for many of the so-called "hot diseases" in the first section of the catechism, such as aillse, rúad, cáer or lubhra, one might argue that these likewise all represent conditions characterised by some kind of swelling or superficial change to the skin or subcutaneous structures. Thus, as has been noted above, lepra (Ir. lubhra) was understood in the medieval period as a 'breakdown' or 'rotting' of the body resulting from the spread of burned humours and leading to various types of rash or cutaneous lesions, while rúad might refer to erysipelas or some other condition that causes a visible redness on the skin.²¹ Both *aillse* and *cáer*, moreover, would seem to denote various types of tumours or swellings.

By contrast, Galen refers in his *De differentiis morborum* to various conditions such as apoplexy, epilepsy, tremor and spasm (convulsion) as being the result of excess cold, which causes constriction in the body.²² In this he echoes two Hippocratic aphorisms, one of which states that 'cold is harmful to bones, teeth, sinews, brain, and spinal marrow, but heat is beneficial', and the other that 'cold makes sores to smart, hardens the skin, causes pain unattended with suppuration; it blackens, and causes feverish rigors, convulsions, tetanus.²³ The concept of 'constriction' or 'convulsion' is no doubt likewise what underlies the

¹⁹ See Johnston 2006: 45, who notes that a common English translation for this term is 'uniform', and that 'in *De morborum differentiis* Galen lists arteries, veins, nerves, bones, cartilage, ligaments, membranes and flesh as *homoiomeric* structures and clearly states that these are the components of organic bodies [...] and are themselves formed from the primary elements'.

²⁰ Johnston 2006: 141.

²¹ One wonders whether the charms against *ruaidhe* recorded by Mackenzie in the nineteenth century, which indicate that this condition could also refer to a swelling of the breast in women or the udder in animals, may likewise constitute a distant echo of this early system of disease classification: see above, n. 11.

²² Johnston 2006: 142.

²³ Jones 1931: 162–3 (*Aphorisms* V.17 and V.20).

various varieties of "cold" diseases listed in the first section of the catechism, which includes several types of 'sharp pain' (*idha*) in areas of the body such as the head, teeth, intestine, loins and bones or muscles.²⁴

The medical catechism from NLS MS 72.1.2 provides an interesting point of comparison to Gilbertus Anglicus' enumeration of different types of leprosy, cited above, in that the list of afflictions caused by heat in the opening section of the text is immediately followed by a second question that seeks to establish how many types (*ernaili*) there are for each of these diseases, including *lubhra*. The terminology used in the catechism for the different varieties of *lubhra* differs significantly, however, from that used to describe the twelve types of *lepra* in the Irish tract on diseases that cites Gilbertus Anglicus. For example, the author of the catechism describes different kinds of *lubhra* using a series of compounds based on the word *bruth*, literally meaning 'a boiling', but probably understood here in the sense of a 'swelling' or 'inflammation':

Is fisidh cā lín earnail atá for lubhra et for aillsi et for loch tuile et ar galor fūail et ar leic et ar dóerg[h]alor et ar cæir et ar rūadh. Nī ansa. Dá ernoil déc for lubhro .i. marbb[h]ruth et fulb[h]ruth et bolgb[h]ruth et derg[b]hruth et comb[h]ruth et coirringnighe et clumhb[h]ruth et atb[h]ruth [...]

It is worth knowing how many types of leprosy and tumours and *loch tuile* and urinary disease and *lecc* and haemorrhoids and *cáer* and *rúad* there are. Not difficult. There are twelve kinds of leprosy, i.e. a deadly inflammation and a bloody inflammation and a blister-like inflammation and a red inflammation and an intense inflammation and [one characterized by] scratching (with the nail of the forefinger?) and a scabby inflammation and a swollen inflammation [...]²⁵

The use of the term *bruth* here probably reflects an understanding of the physical definition of leprosy as a disease caused by excess heat or the spread of burned humours. While it is clear that the types of *lubhra* listed in the catechism do not simply constitute straightforward borrowings of the words used to denote the different varieties of leprosy specified in the work of Gilbertus Anglicus, it is nevertheless possible to identify some parallels between the two lists. For example, the term *corringnighe* might be interpreted as an abstract of the otherwise unattested adjective *corr-ingnech 'having pointed/sharp nails, claws or talons', and thus possibly as a reference to an itchy or scaly skin condition associated with persistent scratching, such as would have been designated by a term like *scabies*.²⁶

²⁴ On this last category, see my comments above, n. 4.

²⁵ NLS MS 72.1.2, fol. 59r13-19.

²⁶ Alternatively, this could be a reference to the nail of the forefinger (corrmhéar).

Thus while one must always be wary of the pitfalls of retrospective diagnosis when dealing with premodern medical texts, the second section of the "medical catechism" in NLS MS 72.1.2 can nonetheless be said to provide some insight into the understanding and observation of the symptoms of particular diseases in medieval Ireland. It is clear that this material is fundamentally based on classical medical doctrine that circulated widely in medieval western Europe. However, in contrast to what we find in the tract on diseases citing the work of Gilbertus Anglicus, the catechism does not simply employ 'classical terms in an Irish, or at least non-classical, dress' to designate particular diseases and their symptoms.²⁷ Instead, the tract would appear to reflect a more complex process of translation from Latin to the vernacular, albeit one that still indicates a genuine understanding on the part of the translator of the Galenic theory underlying discussion of these diseases.

Loch tuile and its derivatives

The answer to the second question in the catechism concerning the various types or divisions (ernaili) of 'hot' and 'cold' diseases also lists several different varieties of a disease called loch tuile.²⁸ This affliction is mentioned alongside lubhra in the first section of the text as an illness caused by excess warmth in the body. The precise meaning of loch tuile is obscure, however, in large part because the term is not attested elsewhere in published Irish medical texts or lexicographical sources. On first analysis, it might be interpreted simply as a combination of the u-stem loch ('lake' or 'pool')²⁹ followed by the genitive singular of tuile ('flood' or 'flow'), and thus translated literally as something like 'a lake of flooding'. The form tuile is also attested as a genitive singular form of the noun tol 'will, desire' (see eDIL, s.v. tol), but a literal translation 'lake of desire' or similar does not shed any additional light on the meaning of the phrase in this context.

Note that *eDIL*, s.v. *ingnech*, includes the example *a chorp lan do créchtaib ingnacha*, translated as "[his body] *full of scratched sores*" (? read *scaly wounds*)'. Another possibility is that the term refers to a condition characterised by some kind of boil on the skin: in the Irish translation of John of Gaddesden's *Rosa Anglica*, reference is made to a type of *gorán* ('pimple, pustule') called *ingen na hoidche* – listed in *eDIL s.v. 1 ingen* 'daughter' –, presumably because it comes up on the body overnight (WULFF 1929: 172.14, 173 and n. 4 [*filiæ noctis*]).

²⁷ One might compare the various methods for creating Irish grammatical terms identified by POPPE (1999: 192), who distinguishes between three different categories: (1) unassimilated classical terms; (2) classical terms in an Irish, or at least non-classical, dress; (3) native words used in a technical sense as equivalents of Latin terms.

²⁸ The list in question is edited and discussed further below, p. 115.

²⁹ That the term was still understood as a *u*-stem is confirmed by the fact that the genitive singular form *locha* is attested in a separate medical text, dicussed further below (RIA MS 24 B 3, p. 63.3; for the full passage, see p. 119–120 of this discussion).

Under the entry for 1 loch meaning e.g. 'lake' or 'pool', eDIL records two terms drawn from published medical texts: namely *loch ochsal* ('the armpit') and loch bléine ('the groin').30 The dictionary gives four attestations of these terms. One is drawn from the Middle Irish glosses on the Lorica-poem attributed to Gildas, where the phrase na locha ochsal glosses the Latin word reniculos.31 Two examples of loch bléine/blén are cited from the seventeenthcentury compendium of medical treatises known as the 'Book of the O'Shiels' (RIA MS 23 K 42) and the published Irish translation of the Rosa Anglica by the fourteenth-century Oxford physician John of Gaddesden, respectively.³² The fourth example is the phrase *cuir ceirin ar na lochaib blen* ('put a poultice on the locha blén'), found in the Irish translation of the Trotula text on gynaecology and women's medicine, the earliest manuscript witness of which is dated to 1352.33 The forms loch ascaille and loch bhléine are likewise both cited in Ó Dónaill's Modern Irish dictionary under the headword loch meaning e.g. 'lake' or 'pool', but also with the specifically medical definition of 'bubo'. This term, deriving from Gk. βουβών 'groin', refers to infected, enlarged and painful lymph nodes that are very often found in the armpits, groin and neck region, and which were a well-known symptom of the bubonic plague believed to have caused the Black Death in the fourteenth century. It is possible that the element *loch* in these phrases originally referred to the large or excessive quantity of liquid or viscous material, such as pus, that may have been associated with such swellings, and that the word was later modified to denote particular parts of the anatomy, such as the armpit or groin, in which those swellings most commonly appeared. Another possibility is that *loch* was here understood in the sense of the 'depression' or 'hollow' that characterises the shape of a pool or lake, and that the definition of 'bubo' given for loch ascaille and loch bhléine in later dictionaries represents a specialised use of phrases that had in origin simply denoted the armpit and groin, respectively.35

³⁰ Note that the word *loch* meaning 'lake' or 'pool' was originally neuter, so one might expect the nominative forms *loch n-ochsal* and *loch mbléine* in Old Irish; however, no such forms are attested in the sources considered here.

³¹ Stokes 1860: 141 and n. 216. The Irish glosses on the *Lorica* hymn are preserved in the copy of the text found in the early fifteenth-century manuscript known as the *Leabhar Breac* (RIA MS 23 P 16). Stokes (1860: 135) argued that the glosses 'are middle-Irish, some of them early middle-Irish, but I can see no evidence that any of them were produced before the eleventh century'. For a more recent edition of the *Lorica*-poem and discussion of its authorship and dating, see Herren 1973 and 1987: 42–5 and 76–89; the latter scholar, drawing on a personal communication with Gearóid Mac Eoin, characterises the glosses in the *Leabhar Breacc* witness as 'late Old Irish with early Middle Irish traces of the period ca. 1000 A.D' (p. 5).

³² Wulff 1929: 200.12.

³³ RIA MS 23 F 19; for an edition of the text, see Wulff 1934: 40.

³⁴ Ó DÓNAILL 1977, s.v. loch (3).

³⁵ I am grateful to the anonymous reader for making this suggestion.

Although the term *loch tuile* is, like *loch ascaille* and *loch bhléine*, found in a specifically medical context, and also appears to incorporate the u-stem noun loch as its first element, it differs somewhat from those two anatomical terms in that it is followed by an abstract noun rather than the name of a specific body part (cf. eDIL s.vv. ochsal 'armpit' and blén 'groin'). In this case, the first element of loch tuile is more likely to have been understood to mean something like 'a pool or lake' in the sense of 'a large source' (of flowing liquid matter), rather than that of the depression or hollow that characterised the lake's physical appearance. In this regard, it is noteworthy that eDIL, s.v.? 4 loch, cites an entry in O'Davoren's glossary that equates the form loch with the word *imad* 'abundance'. ³⁶ If this interpretation is correct, the meaning of the phrase as a whole might be seen to approximate that conveyed by the English term flux (derived from Latin fluxus 'flowing, fluid'), which in a physiological sense could designate 'an abnormally copious flowing of blood, excrement, etc. from the bowels or other organs'. This Latin word was borrowed directly into the Irish medical lexicon elsewhere, as is illustrated by a tract on the plague in the sixteenth-century TCD MS E 3. 3 (1432), where terms such as flux brond ('flux of the belly'), flux fola .i. disinteria ('bloody flux i.e. dysentery') and flux epaticus .i. flux doniter ona haeib ('flux hepaticus i.e. a flux caused by the liver') are all cited as symptoms of the disease in question.³⁸

Further details concerning the meaning of the term *loch tuile* can be gleaned, moreover, from a list of the five different 'species' or 'types' (*ernaili*) of this disease which, like the different types of *lubhra* discussed above, is given in the answer to the second question in the catechism. These are all transparent compounds based on the element *loch*:

A cūig [ernail] im morro ar loch tuile, .i. dergloch et brēnloch et fionnloch et glasloch et tirmloch.

[There are] moreover five [types of] *loch tuile*, that is, a red *loch*, a fetid *loch*, a clear *loch*, a green *loch* and a viscous *loch*.

If the element *loch* is translated in all of these cases either literally as a 'lake' or 'pool' or in the extended sense of 'a large source (of liquid matter)', then one might surmise that the different types of *loch tuile* given in this list (e.g. a 'red pool', a 'fetid pool', a 'clear pool', etc.) could refer to various kinds of bodily discharge in liquid or viscous form. The term *tirmloch* is the least obvious of the five terms given in the list, but may designate a kind of discharge that is either

³⁶ Stokes 1904: 404, no. 1180: luch no loch .i. imad ...

 $^{^{37}}$ Oxford English dictionary online (http://www.oed.com">http://www.oed.com), s.v. 'flux, n.', I.1.a [accessed 14 December 2018].

³⁸ Wulff 1926-1928: 146-7 and 150-1.

³⁹ NLS MS 72.1.2, fol. 59v1-2.

less copious or more viscous than the other varieties. This interpretation is supported by three comparable compounds citied in *eDIL*, *s.v. tírim*, *tirim* 'dry', where the intended sense of the prefix *tirm*- is clearly not 'dry' in a strict sense, but rather something along the lines of 'shallow' or 'containing less liquid than usual'. Thus the compounds *tirmlinnte* and *tirmshroth* are tentatively translated in the dictionary as 'with shallow lakes?' and 'shallow stream?', respectively, while the adjective **tirmaibnech* may mean something like 'of shallow rivers'.⁴⁰ The compound *tirmloch* that is attested in the context of the medical tracts discussed here could well be an analogous usage, indicating a 'pool' of discharge that, while more copious than would be normal in a healthy human being, is not as abundant or fluid as the varieties designated by the terms *glasloch*, *brénloch*, *fionnloch* or *dergloch*.

Text 2: a compendium of herbal remedies

The meaning of the term *loch tuile* and its associated compounds as they are attested in the catechism from NLS MS 72.1.2 can be further clarified by examining a separate unpublished Irish-language medical compendium that consists mainly of herbal remedies and charms for various ailments. The text in question was copied around the end of the fifteenth and the beginning of the sixteenth century by Conla Mac an Leagha, a member of the hereditary family of physicians of that name.⁴¹ It is preserved in what was originally a single manuscript, but now survives as fragments in two separate, composite manuscripts: RIA 24 B 3 (445), pp. 33–93 and RIA 23 N 29 (467), ff. 1–9.⁴² As is typical of many comparable medical compendia of both the early and later medieval periods,

⁴⁰ The term *tirmlinnte* occurs in a sixteenth-century poem by a brother of the famous poet Tadhg Dall Ó Huiginn, and is translated by its editor as 'with dried-up lakes (?)' (O'RAHILLY 1927: 139, 204 and 264). *Tiormshroth* is found in a contemporaneous poem by Fearghal Óg Mac an Bhaird (edited, but not translated, by MAC CIONNAITH 1938: 410, §23). *Tiormaibhnech* 'of shallow rivers' is found in a sixteenth-century panegyric of Fiach O'Byrne of Glenmalura by the poet Niall Ó Ruanadha, preserved in British Library MS Egerton 176 (O'GRADY 1926: 500–1).

⁴¹ For further details on the Mac an Leagha physicians and their manuscripts, see WALSH 1935, Ó MURAÍLE 2016: 100-1 and HAYDEN 2018.

⁴² These fragments are not recognised as forming a single text in the published catalogue of Royal Irish Academy manuscripts: see MULCHRONE *et al.*, 1931–1933: 1183–5 (noting only their similarity) and 1220–2. The RIA catalogue description is based largely on the observations of O'Curry 1842–1844: i, 258–61. More recently, Aoibheann Nic Dhonnchadha has produced the following revised collation of the two fragments, which clearly shows their origin as a single text (noted in print by STIFTER 2005: 161):

RIA 445 (24 B 3), pp. 33-70

RIA 467 (23 N 29), ff. 1-4

RIA 445 (24 B 3), pp. 71-4

the cures included in this collection – many of which are written in verse – are for the most part arranged in *a capite ad calcem* order according to the part of the body they are intended to treat.⁴³

In the context of the present discussion, it is noteworthy that several remedies for the affliction referred to as *loch tuile* occur in the section of this compendium that deals with pulmonary ailments, beginning with the following stanza:

[D]o g[h]allraib na scam[h]ān is lab[h]urt[h]a sīsanai:

Glasloch brēnloch findloch ān is do g[h]allraib[h] na scam[h]ān. Tirmloch, dergloc[h], nī saor sin, mar aon risin cosachtaig[h].

Of afflictions of the lungs, it is discussed here below:

Green *loch*, fetid *loch*, fair clear *loch* are among the afflictions of the lungs. Dry *loch*, red *loch*, those are not noble, along with the cough.⁴⁴

The terms cited in this stanza clearly correspond to the various 'types' or 'divisions' (*ernaili*) of *loch tuile* cited in the medical catechism in NLS MS 72.1.2. The quatrain is followed, moreover, by a series of remedies for these and other ailments affecting the region of the chest or abdominal area.⁴⁵ For example, one remedy begins $Ar\ galur\ mbrond\ 7\ ar\ loch\ tuile\ 7\ air\ l\bar{lr}$ ('for ailment of the abdomen and for *loch tuile* and for diarrhoea'),⁴⁶ while another begins $ar\ loch\ tuile\ 7\ ar\ l\bar{lr}$ 7 ar $cosachtaigh\ 7\ ar\ gab$ áil $an\bar{a}la$ ('for $loch\ tuile$ and for diarrhoea and for cough and for shortness of breath').⁴⁷

In attempting to elucidate the precise meaning of the terms used for various types of pulmonary ailments in the Irish compendium copied by Conla Mac an

RIA 467 (23 N 29), ff. 6-9

RIA 445 (24 B 3), pp. 75-93.

⁴³ Other aspects of this text, including its collection of versified medical recipes, are discussed in HAYDEN 2018 and HAYDEN 2019.

⁴⁴ RIA MS 24 B 3, p. 59.34-7.

⁴⁵ Recipes for *loch tuile* are found on pp. 59–65 of RIA MS 24 B 3. One of the versified recipes for this ailment has been edited and translated in full in HAYDEN 2018: 109–10.

⁴⁶ RIA MS 24 B 3, p. 62.35.

⁴⁷ RIA MS 24 B 3, p. 63.28. The first word of the final ailment in this list is abbreviated to *gab*-; I have expanded it to *gabáil*, understood in the extended sense of 'seizing' (see *eDIL*, s.v.), and therefore possibly a reference to shortness of breath. As suggested by an anonymous reader, another possibility is that the word intended here is *gábud* 'danger, peril, stress'. It is clear, in any case, that some kind of breathing difficulty is in question.

Leagha, one might imagine that the corresponding sections of medieval Latin therapeutic manuals and remedy-books - many of which are arranged in a similar head-to-toe order – would offer a logical point of comparison. It is not clear, however, that *loch tuile* and the various associated compounds based on the element *loch* simply constitute straightforward translations of any particular set of Latin terms used in such manuals, a problem which is compounded by the fact that the medieval Latin technical vocabulary relating to afflictions of the lungs was itself considerably fluid. For example, the terms peripneumonia and pleuresis, both of which are discussed at length with regard to ailments of the lungs in various Latin medical compendia compiled between the eleventh and fifteenth centuries, stemmed directly from Greek anatomical terms such as πνεύμων ('lung') and πλευρά ('sides of the body, ribs'), and not from qualitative descriptions of the symptoms of particular diseases. Moreover, Demaitre (2013: 207) has observed that peripneumonia (or peripleumonia) was often employed as 'a rather open term for an infection of the lung, a category that occasionally overlapped with pleuresis in spite of formal distinctions. Overlaps and confusion were due to imperfect anatomical understanding, to interactions and apparent similarities between infections, and even to continued difficulties in forging a Latin medical vocabulary'. He similarly notes that the term pleuresis, which appears to have denoted an affliction close to the pneumonia of modern nosology, generated intense debate among medieval scholars concerning definitions, diagnosis, cases, and cures. Other conditions that formed part of the discussion of lung ailments in medieval Latin manuals included asthma or shortness of breath, cough (tussis) and consumption (ptisis).48

The discussions of pulmonary ailments in several vernacular Irish medical texts that are comparable in form and content to the compendium discussed here simply retain these Latin terms, sometimes simply altering them slightly to conform with the conventions of Irish phonology and orthography. Thus a separate collection of cures for various diseases found in NLI MS G 11, much of which may derive from the *Lilium medicinae* of the fourteenth-century Montpellier physician Bernard of Gordon, contains sections on *pleurisis*, *tusis* [*sic*] and *periplemonia*, but nowhere mentions the term *loch tuile* or any of its derivatives. ⁴⁹ Similarly Latinate forms are found in the section concerning respiratory ailments within a so-called 'native compilation' on pathology that draws from several different Irish versions of Latin sources, and was copied in 1512

⁴⁸ On medieval attempts to define these ailments, see Demaitre 2013: 211-30.

⁴⁹ The relevant *incipits* to these sections occur on pp. 222–4 of the manuscript. Ní Shéaghdha (1967: 75) notes that this treatise is 'more or less similar to the corresponding sections in a tract on diseases contained in [BL] Harl. 547, f. 12', and that O'Grady (1926: 178–99) had shown the latter to be mainly derived from Bernard of Gordon's *Lilium*.

by Conla's brother, the Sligo physician Maeleachlainn Mac an Leagha.⁵⁰ It is clear, therefore, that the texts which employ variants of the term *loch tuile* to describe types of lung ailment represent a branch of the medieval Irish medical lexicon that differs in some significant respects from that found in other Irish collections of remedies with the same general structure and practical aims.

One final passage in the section on pulmonary ailments from Conla Mac an Leagha's medical compendium does, however, offer some more detailed insight into the meaning of the term *loch tuile* and its derivative compounds. This consists of a brief discussion of the 'signs' (*comarthadha*) of the disease:⁵¹

[...] comarthadha an locha tuile an $ns\bar{o}$.i. mad[h] fuil b[h]es imon craidhe, is derg a ingne. Mad[h] loch tuile, is findb[h]uid[h]e a i $ngne^{52}$ gid[h]ed[h] is m[h] \bar{o} a t[h]es \bar{o} n f[h]uil do b[h]eth iman craid[h]e n \bar{a} \bar{o} n loch tuile. Mad[h] brenloch, tic all us d \bar{e} . Mad dergloch, as garb[h] a f[h]indfadh τ as buid[h]e a g[h]n \bar{e} uile is illdat[h]ach. Mad[h] buid[h]e in loch tuile, as buid[h]e τ as find a c[h]orp uile acht meóir a c[h]os τ a lam[h], τ arrainded[h]a arda ina $chl\bar{a}$ b[h] τ ig[h]a ina thaob[h] c[h]l \bar{e} mad[h] fer τ na taob[h] d[h]es mad[h] ben. Et is am[h]laidh b[h] \bar{s} in glasloch, maille seleg[h]ar glas

NIC DHONNCHADHA 2000: 219, referring to King's Inns Library MS 15, ff. 77–127. For specific examples, see fol. 120v25 of the text: Pleuresis est duplexi. is ed is pleuresis ann ... ('Pleuresis' is twofold ... i.e. this is what pleuresis is ...') and fol. 121vi: [P]erplemonia est apostema pulmonis .i. as ed is perplemonia ann do reir Auerroes ('Perplemonia' is an impostume of the lung, i.e. this is what perplemonia is according to Averroes'). On the relationship between Maeleachlainn and Conla Mac an Leagha, see Walsh 1935.

⁵¹ RIA MS 24 B 3, p. 63, ll. 3–14. A second copy of this section of the text, which contains some variant readings but is poorly legible in parts, is found in RIA MS 23 M 36, p. 20.

⁵² Cf. RIA MS 23 M 36, p. 20.4, which uses the article + plural form *na hingne* twice here.

⁵³ Cf. RIA MS 23 M 36, p. 20.6: is garb a finnad 7 is illdathach a gnē.

⁵⁴ I have not yet found any direct parallels for this doctrine in discussions of pulmonary ailments from other medical texts. It may, however, constitute an inversion of the Hippocratic tradition, widely disseminated in the works of Galen, that associated males with the right side of the uterus and females with the left, since the right male testis and the right side of the uterus were believed to be nourished by a more purified, and therefore warmer, blood than the left. Thus the fourteenth-century physician Bernard of Gordon states in his *Lilium medicinae* that a woman carrying a male foetus would have a more agile right eye, experience swelling on the right side of the abdomen, move the right foot first when walking, and have a greater pulse on the right side: see Nic Dhonnchadha 2002: 343 and 355. This dichotomy is also attested in earlier sources; for example, the tenth- or eleventh-century Anglo-Saxon collection of remedies, charms and prayers known as the Lacnunga contains a charm to cure worms that instructs one to sing an incantation into the right ear of a male and the left ear of a female (Grattan & Singer 1952: 107). It may be noteworthy that the particular incantation in question contains Old Irish forms (on which see Meroney 1945: 177-8 and Stifter 2012).

nem[h]d[h]īleghtha, γ nī dīan m[h]arb[h]us, γ a n-ūac[h]tur na scam[h]ān b[h]īs [...]

[...] signs of *loch tuile* here, i.e. if it is blood that is around the heart, his nails are red. If it is *loch tuile*, his nails are light yellow although his temperature is greater from the blood being around the heart than from the *loch tuile*. If it is foul-smelling *loch*, sweat comes out of him. If it is red *loch*, his hair is rough and his whole countenance is yellow and multi-coloured. If the *loch tuile* is yellow, his whole body is yellow and white save his toes and fingers, and [he has] high pains in his chest, and a pain in his left side if it is a man and in her right side if it is a woman. And it is thus that the green *loch* is, with a green undissolved sputum, and he does not die swiftly, and it is in the upper part of the lungs [...]

Although the immediate source of this passage is not yet clear to me, it is nonetheless possible to identify some similarities between the 'signs' of loch tuile enumerated here and descriptions of lung ailments found in other medieval medical sources. For example, DEMAITRE (2013: 208, 216) has observed that the four distinctive symptoms of pleuresis noted in several late-medieval medical manuals were a constant fever, breathing difficulty, cough, and a sharp pain in the side, while the authors of medieval Latin therapeutic manuals also distinguished between a wet or dry cough marked by the production or absence of sputum, respectively. Expectoration of pus or blood (the latter of which had, since the time of Hippocrates, been considered a hallmark of consumption or ptisis in particular) would have naturally been seen as something of urgent concern, and Bernard of Gordon argued that ptisis resulted from 'rheumatic matter running from the head' which could be 'bloody or choleric, sharp and corrosive, or salty phlegm'.55 Consequently, the fact that Conla Mac an Leagha's medical compendium treats loch tuile in a section concerned with ailments affecting the region of the lungs may indicate that the association of the disease with adjectives like derg, glas, finn, brén and tirm is simply an attempt to characterise different types of chest infection marked by symptoms such as phlegm that is bloody (derg), green (glas), white or clear (fionn), fetid (brén), or viscous (tirm).56 In other words, if one translates the term loch in the extended sense of 'a large source or abundance (of liquid matter)', as suggested above, terms such as dergloch and glasloch might be understood as 'an abundance of red (discharge)' and 'an abundance of green (discharge)', respectively.

This approach to describing the symptoms of respiratory infections using such qualitative terms can be compared to a passage in a Welsh medical text,

⁵⁵ Demaitre 2013: 223.

⁵⁶ On the meaning of this last term, see above, p. 115–116.

compiled around the thirteenth century but possibly drawing on earlier material, which distinguishes between three different types of lung disease (*ysgy-ueint*) as follows:

Tri ryú ysgyueint yssyd. ysgyueint úst, a gwynn ysgyueint; [a du ysgyveint]. a gúaeú dan y dúyuronn. ac y dan yr adein. ac ympenn yr ysgúyd, a chochi y deurud. a ual hynn y medegynyeithyr [...]

'There are three kinds of lung disease; – simple pneumonia, white pneumonia, (bronchitis) and black pneumonia, (phthysis) which is marked by pain below the mammae, under the armpit, and in the top of the shoulders, with (hectic) redness of the cheeks. And thus are they treated. […]'⁵⁷

The term *ysgyueint* itself refers in a literal sense to the lungs, and only figuratively to pulmonary disease; it therefore does not bear a direct semantic relationship to *loch tuile*, which does not carry any such literal meaning in relation to a part of the human anatomy. However, the three types of *ysgyueint* cited in the Welsh source are, like the different varieties of loch tuile found in the Irish medical texts discussed above, seemingly based on qualitative descriptions of the symptoms of the disease. Thus *ysgyueint úst*, translated by Pughe as 'simple pneumonia', literally means 'lungs of pain' (< W. gwst 'pain, torment'), while the colour-adjectives gwynn ('white') and du ('black' or 'dark') that modify the word *ysgyueint* in the other two categories of the disease – translated by Pughe as 'bronchitis' and 'phthysis', respectively – may reflect an attempt to describe the nature of the discharge associated with each of these conditions. In other words, bronchitis was understood to produce a clear or white phlegm, while phthisis (from Gk. $\varphi\theta$ i σ i ς) was associated with the expectoration of a darker substance such as blood. In this respect, the second and third types of vsgvueint listed in the Welsh source might be compared to the Irish terms findloch and dergloch, respectively.

Further attestations in a separate manuscript source

The use of the term *loch tuile* and its derivatives in the medical catechism and the compendium of remedies discussed above would seem to indicate some kind of connection between those two texts and the manuscripts in which they are found, the precise nature of which will only become clear upon much more detailed analysis of their contents. As a preliminary observation in this regard, however, the present discussion will conclude by pointing up three further attestations of this terminology found in an entirely separate medical

⁵⁷ WILLIAMS & PUGHE 1861: 2–3 (text) and 39–40 (trans.); for comments on the dating of the extant Welsh medical material, see OWEN 1975–1976.

manuscript, which offers several further intriguing parallels with the material examined up to this point.

The manuscript in question, Dublin, National Library of Ireland G11, is a fifteenth-century vellum codex totalling 476 pages in length. Its main scribe was Donnchadh Ó Bolgaidhi, who would appear to have belonged to the medical family of that name associated with the region of south-east Leinster.⁵⁸ The contents of G 11 have been described by its cataloguer, Nessa Ní Shéaghdha, as 'a representative medical library' consisting of 'texts dealing with most of the known branches of medicine, as well as materia medica, medical glossaries. medico-philosophical, medico-legal and alchemical texts'.59 All three attestations of the term *loch tuile* in this manuscript occur in the last quarter of the codex. The first example, found on p. 404, consists of remedies for both loch tuile and dergloch tuile that are included within a series of cures for ailments of the chest and voice beginning Urcosc ann so ar cumga in cleib 7 do glanad in ghotha ('a preventive measure for constriction of the chest and for clearing the voice here').60 These remedies are found not far from a substantial compilation of cures, charms and prayers against various ailments on pp. 393-6 of the manuscript – several of which, according to Ní Shéaghdha (1967: 85), 'appear to be of native origin'. It is no doubt noteworthy, in assessing the relationship of this section of material in G 11 to the two texts discussed above, that a variant version for one of the charms in this compilation of "native cures" is found in the compendium of medical remedies copied by Conla Mac an Leagha in RIA MS 24 B 3,61 while two others occur in the fourth section of NLS MS 72.1.2 – in other words, the same section of that manuscript that contains the medical catechism. 62 In this regard, it is perhaps also significant that the G 11 manuscript was at some point in the possession of one 'Maoilseac[h]luinn Mhic in Leagha', who signed his name on p. 53. The similarities in content between G11 and RIA MS 24 B 3 in particular thus call into question Ní Shéaghdha's claim (1967: 68) that 'This Maolsheachlainn is not [...] to be confused with the distinguished medical man of the same name who flourished in the 15th-16th cent[uries], and about whom Fr. Paul Walsh has written' (referring to WALSH 1935), since the

 $^{^{58}}$ Ní Shéaghdha 1967: 41.

⁵⁹ Ní Shéaghdha 1967: 66.

The collection of recipes for chest ailments begins at p. 404a30 of the manuscript, next to which the word *cliabh* is written in a marginal box. The recipe for *loch tuile* begins at 404b7 (*Urcox ar loch tuili 7 ar cliabhgal*ur), and that for *dergloch tuile* at p. 404b9 (*Urcox ar dergloch tuili*).

⁶¹ See Ní Shéaghdha 1967: 86, no. 12 (charm against eye ailment on p. 394b), which also occurs in RIA MS 24 B 3, p. 53.36–8. For discussion of this charm, see Carney AND Carney 1960: 148–9 and Borsje 2016:45.

 $^{^{62}}$ The first of these is a charm against excessive menstrual flow, found on p. 393b of NLI MS G 11 and fol. 33v(58r)5 of NLI MS 72.1.2; the second is a charm against web in the eye, found on p. 396a of NLI MS G 11 and fol. 33v(58r)1 of NLS MS 72.1.2.

Mac an Leagha physician in question was the brother of the principal scribe of the 24 B 3 manuscript, Conla Mac an Leagha.

The second attestation of the term *loch tuile* in NLI MS G 11 likewise points to a link between this manuscript and material preserved in NLS MS 72.1.2. This occurs within a note on the proper way to go about bathing in order to avoid giving rise to particular afflictions, found just four pages after the aforementioned remedies for *loch tuile* and *dergloch tuile*.⁶³ Within this passage, it is explained that if a person lies with his left side under him in the bath, his blood will flow into the left side of the body, and turn into loch tuile (madh ē a lethtāob clī bīs fáe, rachaidh a fuil ina leth clī 7 do dēna loch tuili dhī).64 A variant version of this passage forms the penultimate question-and-answer pair in the catechism, although there the word loch tuile does not occur; rather it is stated that if a person lies on his left side in the bath, silfidh a f[h]uil ina c[h]raidhi 7 do-gēna galar 7 lūas craidhi ('the blood will flow into his heart and will cause sickness and swiftness (palpitation?) of the heart'). 65 A separate section of NLS MS 72.1.2, however, contains yet a third version of the passage on bathing that, as in G 11, cites *loch tuile* as the consequence of lying on one's left side in the water.66 It is possible that the use of the ambiguous term galar ('sickness, affliction') in the copy of the passage that forms part of the catechism may have arisen from uncertainty regarding the meaning of the term loch tuile at some point in the transmission of this material, the origin of which is unclear; however, the following reference in that version to *lúas craidhi* suggests that the galar in question was nonetheless understood to be something that affected the region of the abdomen or chest.

The third and final attestation of the term *loch tuile* in NLI MS G 11 to be noted here occurs in a text that also offers an intriguing thematic parallel with the medical catechism. The work in question is the unique copy of the Old Irish medico-legal tract *Bretha Déin Chécht* ('The judgements of Dían Cécht'), preserved on pp. 451–6 of G 11. This tract, which is principally concerned with the compensation due to physicians for treating different types of injuries, originally formed part of the large collection of legal material known as the *Senchas Már*, which has most recently argued to have been compiled at Armagh in the mid-seventh century.⁶⁷ One section of the medico-legal tract consists of a list of so-called 'doors of the soul', which were seemingly understood to be places in the body that were particularly vulnerable to injury due to the proximity of a major vein or artery, and the treatment of which would therefore incur a higher physician's fee.⁶⁸ It is noteworthy that a very similar list of

⁶³ NLI MS G 11, p. 408a1–19.

⁶⁴ NLI MS G 11, p. 408a11-13.

⁶⁵ NLS MS 72.1.2, 64v7-8.

⁶⁶ NLS MS 72.1.2, fol. 73vb1-22.

⁶⁷ Breatnach 2011: 42.

⁶⁸ For the passage in question, see BINCHY 1966: 24–5 (§2A).

'doors of death' is preserved in the medical catechism from NLS MS 72.1.2, while many other individual question-and-answer pairs in that text expand on this list by providing concise anatomical explanations for why particular body parts are considered dangerous. ⁶⁹ In the introduction to his edition of *Bretha Déin Chécht*, Binchy voiced some uncertainty regarding the antiquity of both the list of 'doors of the soul' in the medico-legal tract and another list, immediately following it in the text, of the seven bones in the body which were most vulnerable to a serious fracture. Noting that this portion of *Bretha Déin Chécht* was written in smaller script, he suggested that both lists were added by a later scribe, but were perhaps taken from an older source, as knowledge of them was indicated in other sections of the law-tract. ⁷⁰

One of the other sections in question (§17 of Binchy's edition) provides a list of the 'twenty wounds from which the leech takes half [of the penalty]', the first nineteen of which are reckoned to comprise 'the twelve wounds in the doors of the soul and the seven fractures' (Fichi fuil dia mber liaig let .i. na da fuil .x. na ndoirrsi anma 7 na .uii. cnamcom[b]a(i)g it næi fuili(i) dec samlaid.) The twentieth wound to incur such a high fee is then described as toidecht fola a bru for beolu combithochur fola ('[a wound which causes ...] a hemorrhage from the belly over the lips with constant vomiting of blood'), and the words toidecht fola a bru for beolu are glossed interlinearly in the manuscript with the phrase .i. in lochtuili ł tiachtain fola tar beolu, which Binchy translates as 'the dark (?) tide, or the coming of blood across the lips'. Here Binchy has tentatively interpreted the word loch in the sense given in eDIL s.v. 2 loch, i.e. as an adjective meaning 'black' or 'dark'. However, a form locht(h)uile is not listed among the compounds given for this term by the dictionary, and the two attestations of it as a substantive indicate that the word meaning 'black' or 'dark' take the form of an ā-stem noun, whereas the first element of the term loch tuile in the medical tracts discussed here is attested as a u-stem. Finally, the medical sources examined above also indicate that the term *loch tuile* may have been applied to 'pulmonary affliction' in a more general sense, whereas the term dergloch, listed in the catechism as a particular 'type' (ernail) of loch tuile, seemingly referred more specifically to a pulmonary ailment that resulted in haemoptysis.

Nonetheless, the definition of *loch tuile* in a gloss to *Bretha Déin Chécht* as *tíachtain fola tar béolu* 'the coming of blood across the lips' clearly indicates that the term designated an ailment in which a copious quantity of fluid material was emitted from the body via the mouth – a condition that would most likely result from some kind of pulmonary affliction. Moreover, the use of the term in this context points to the familiarity of the G11 glossator with elements

 $^{^{69}}$ Hayden 2016.

⁷⁰ Binchy 1966: 5 and 10.

⁷¹ BINCHY 1966: 32-3. I am grateful to Liam Breatnach for bringing this gloss to my attention

of the medical lexicon also attested in the catechism from NLS MS 72.1.2 and the compendium of recipes in RIA MSS 24 B 3 and 23 N 29, but not – at least according to the present state of research – widely attested elsewhere in the surviving corpus of Irish-language medical tracts.

Conclusion

It is clear from analysis of the four manuscript sources examined above that, in the context of medieval Irish medical writing, the term loch tuile was understood as a reference to pulmonary affliction. It may originally have been intended to translate a Latin word such as fluxus, which in the medical domain could denote fluid matter that often exited various bodily orifices in large quantities. This would require an interpretation of the element *loch* as denoting a 'large source' or 'abundance' of material emitted from the body, in this case more specifically the lungs. It is apparent, furthermore, that the numerous compounds based on this term that are cited in the Irish medical tracts discussed here, namely dergloch, findloch, brénloch, glasloch and tirmloch, were formed in order to distinguish between the various symptoms characteristic of respiratory infections, such as the colour, consistency and smell of the patient's sputum and the presence or absence of haemoptysis; in the case of tirmloch, the discharge in question may have been either less plentiful or more viscous in nature. That this terminology contrasts with the use in other Irish medical texts of more obvious 'Latin terms in Irish dress', such as peripleumonia, pleuresis and ptisis, suggests that the medieval Irish medical lexicon did not exclusively consist of Latin terms that had merely been adapted to suit the conventions of Irish orthography in representing Irish phonology, but rather could exhibit a considerable degree of variety. Whether such variety can be ascribed primarily to diachronic or synchronic (e.g. geographical) factors remains to be determined. As a final point, the lexical and thematic correspondences between texts in NLS MS 72.1.2, RIA MSS 24 B 3 and 23 N 29, and NLI MS G 11 that have been identified in this discussion indicate that further research into the connections between these various medical manuscripts might shed considerable light on the scholarly networks that obtained across Ireland and Gaelic-speaking Scotland during the medieval period.

References

BANNERMAN, John, 1986: *The Beatons: a medical kindred in the classical Gaelic tradition.* Edinburgh: John Donald.

BINCHY, Daniel A., 1966: 'Bretha Déin Chécht', Ériu 20, 1-66.

Borsje, Jacqueline, 2016: 'Medieval Irish spells: "words of power" as performance'. In: Ernst van den Hemel & Asja Szafraniec (ed.), *Words: religious language matters.* New York: Fordham University Press, 35–53.

- Breatnach, Liam, 2011: *The Early Irish law text* Senchas Már *and the question of its date* (E.C. Quiggin memorial lectures 13). Cambridge: Department of Anglo-Saxon, Norse & Celtic.
- CAMERON, Malcom Laurence, 1993: *Anglo-Saxon medicine* (Cambridge studies in Anglo-Saxon England 7). Cambridge: Cambridge University Press.
- CARNEY, James, & Maura CARNEY, 1960: 'A collection of Irish charms', Saga och Sed: Kungliga Gustav Adolfs Akademiens årsbok, 144–152.
- Crawford, Ciara, 2011: *Disease and illness in medieval Ireland.* Unpublished PhD thesis, National University of Ireland, Maynooth.
- Demaitre, Luke, 2007: *Leprosy in premodern medicine: a malady of the whole body*, Baltimore: Johns Hopkins University Press.
- Demaitre, Luke, 2013: *Medieval medicine: the art of healing, from head to toe.* Santa Barbara, CA: Praeger.
- DINNEEN, Patrick S., 1904: Foclóir Gaedhilge agus Béarla. An Irish-English dictionary. New edition, revised and greatly enlarged, 1927 (reprinted with additions in 1934). Dublin: Irish Texts Society.
- Dwelly, Edward, 1911: Faclair Gàidhlig agus/gu Beurla le dealbhan. Dwelly's/The illustrated Gaelic-English/Gaelic to English dictionary. Revised edition. Herne Bay: Edward Dwelly (reprinted Glasgow: Gairm, e.g. tenth edition 1988, twelfth edition, 2001; re-edited, based on fourth edition [Glasgow: MacLaren & Sons, 1949], Glasgow: Akerbeltz, 2011).
- eDIL: Electronic dictionary of the Irish language based on Old and Middle Irish materials. URL: http://www.dil.ie.
- GARCÍA-BALLESTER, Luis, 1982: 'Arnau de Vilanova (c. 1240-1311) y la reforma de los estudios médicos en Montpellier (1309): El Hipócrates latino y la introducción del nuevo Galeno', *Dynamis* 2, 97–158.
- GARCÍA-BALLESTER, Luis, 1998: 'The new Galen'. In: Klaus-Dietrich Fischer, Diethard Nickel & Paul Potter (ed.), Text and tradition: studies in ancient medicine and its transmission, presented to Jutta Kollesch. Leiden: Brill, 55–83.
- Grattan, John Henry Grafton, & Charles Singer, 1952: Anglo-Saxon magic and medicine: illustrated specifically from the semi-pagan text 'Lacnunga'. London: Oxford University Press.
- HAYDEN, Deborah, 2014: 'On the meaning of two medieval Irish medical terms: *derg dásachtach* and *rúad (fh)rasach*', *Ériu* 64, 1–21.
- HAYDEN, Deborah, 2016: 'Observations on the "doors of death" in a medieval Irish medical catechism'. In: Liam P. Ó Murchú (ed.), Rosa Anglica: reassessments (Irish Texts Society subsidiary series 28). London: Irish Texts Society, 26–56.
- HAYDEN, Deborah, 2018: 'Three versified medical recipes invoking Dían Cécht'. In: Anders Ahlqvist & Pamela O'Neill (ed.), Fír fesso. A Festschrift for Neil McLeod (Sydney series in Celtic studies 17). Sydney: Celtic Studies Foundation, University of Sydney, 107–123.

- HAYDEN, Deborah, 2019: 'Attribution and authority in a medieval Irish medical compendium', *Studia Hibernica* 45, 19–51.
- HERREN, Michael, 1973: 'The authorship, date of composition and provenance of the so-called "lorica Gildae", *Ériu* 24, 35–51.
- Herren, Michael, 1987: *The Hisperica famina ii. Related poems.* Toronto: Pontifical Institute of Medieval Studies.
- JOHNSTON, Ian, 2006: *Galen: on diseases and symptoms*. Cambridge: Cambridge University Press.
- JONES, William Henry Samuel, 1931: Hippocrates vol. IV: Nature of man. Regimen in health. Humours. Aphorisms. Regimen 1–3. Dreams. Heracleitus: On the universe (Loeb Classical library 150). Cambridge, MA: Harvard University Press.
- LINDBERG, David C., 2007: The beginnings of western science. The European scientific tradition in philosophical, religious, and institutional context, prehistory to A.D. 1450. Second edition. Chicago: University of Chicago Press.
- MACARTHUR, William P., 1949: 'The identification of some pestilences recorded in the Irish annals', *Irish historical studies* 6/23, 169–188.
- Mac Cionnaith, Láimhbheartach (ed.), 1938: *Dioghluim dána*. Baile Átha Cliath: Oifig an tSoláthair.
- MACKENZIE, William, 1895: Gaelic incantations charms and blessings of the Hebrides, with translations, and parallel illustrations from Irish, Manx, Norse, and other superstitions. Inverness: Northern Counties Newspaper and Printing and Publishing Company.
- McLeod, Neil, 1992: *Early Irish contract law* (Sydney series in Celtic studies 1). Sydney: Centre for Celtic Studies, University of Sydney.
- Meroney, Howard, 1945: 'Irish in the Old English charms', Speculum 20/2, 172–182.
- MEYER, Kuno (ed.), 1912: 'Sanas Cormaic: an Old-Irish glossary compiled by Cormac úa Cuilennáin, King-Bishop of Cashel in the tenth century'. In: Osborn Bergin, Richard Irvine Best, Kuno Meyer & James George O'Keeffe (ed.), *Anecdota from Irish manuscripts. Vol. IV.* Halle: Max Niemeyer / Dublin: Hodges, Figgis & Co., 1–128 (facsimile reprint with the editor's corrections Felinfach: Llanerch, 1994).
- MEYER, Kuno, 1921: s. Julius РОКОRNY (ed.), 'Nachlass Kuno Meyer. [2.] Zur keltischen Wortkunde X, 247: Ir. *rop*', *Zeitschrift für celtische Philologie* 13, 192–193.
- Mulchrone, Kathleen, et al., 1931–1933: Catalogue of Irish manuscripts in the Royal Irish Academy. [Vol. 2.] Fasciculi VI–X [MSS 253–483]. Dublin: Royal Irish Academy, Hodges, Figgis & Co. / London: Williams & Norgate.
- NIC DHONNCHADHA, Aoibheann, 2000: 'Medical writing in Irish', *Irish journal of medical science* 169/3 (July-September), 217–220. Reprinted from John Benignus Lyons (ed.), 1999: 2000 years of *Irish medicine*. Dublin: Éireann healthcare publications, 21–26.

- NIC DHONNCHADHA, Aoibheann, 2002: 'Irish medical writing, 1400–1600'. In: Angela Bourke et al. (ed.), The Field Day anthology of Irish writing. Volume IV: Irish women's writing and traditions. Cork: Cork University Press, 341–357.
- Ní Shéaghdha, Nessa, 1967: Catalogue of Irish manuscripts in the National Library of Ireland. Fasciculus I: MSS. G 1–G 14. Dublin: Dublin Institute for Advanced Studies.
- O'BOYLE, Cornelius, 1998: *The art of medicine: medical teaching at the University of Paris*, 1250–1400 (Education and society in the Middle Ages and Renaissance 9). Leiden: Brill.
- Ó Cuív, Brian (ed.), 1952: 'Fragments of two medieval treatises on horses', *Celtica* 2.1, 30–63.
- O'Curry, Eugene, 1842–1844: Catalogue of Irish manuscripts of the Royal Irish Academy, first series (RIA MS 67 E 9–11). 3 vols. [Unpublished manuscripts; online RIA catalogue entry:]
- Ó DÓNAILL, Niall, 1977: Irish-English dictionary. Dublin: An Gúm.
- O'Grady, Standish H., 1926: Catalogue of Irish manuscripts in the British Museum. Volume I. London: British Museum (reprinted as Catalogue of Irish manuscripts in the British Library [formerly British Museum]. Volume I. Dublin: Dublin Institute for Advanced Studies, 1992).
- Ó Muraíle, Nollaig, 2016: 'The hereditary medical families of Gaelic Ireland'. In: Liam P. Ó Murchú (ed.), *Rosa Anglica: reassessments* (Irish Texts Society subsidiary series 28). London: Irish Texts Society, 85–113.
- O'RAHILLY, Thomas F. (ed.), 1927. *Measgra dánta. Miscellaneous Irish poems.* 2 parts. Dublin and Cork: Cork University Press.
- O'RAHILLY, Thomas F., 1932. *Irish dialects past and present, with chapters on Scottish and Manx*. Dublin: Browne and Nolan (reprinted Dublin: Dublin Institute for Advanced Studies, 1976).
- Owen, Morfydd E., 1975–1976: 'Meddygon Myddfai: a preliminary survey of some medieval medical writing in Welsh', *Studia Celtica* 10/11, 210–233.
- Paton, Anne E., 2014: An examination of the evidence for the existence of leprosy and Hansen's disease in medieval Ireland. Unpublished PhD thesis, University of Glasgow.
- POPPE, Erich, 1999: 'Latinate terminology in Auraicept na n-éces'. In: David Cram, Andrew Linn & Elke Nowak (ed.), History of linguistics 1996: selected papers from the seventh international conference on the history of the language sciences, Oxford, 12–17 September 1996. Vol. 1: Traditions in linguistics worldwide. Amsterdam/Philadelphia: John Benjamins, 191–201.
- Scott, Brian G., 1981: 'Varia II. 1. Early Irish cáer', Ériu 32, 153–154.

- SnG: Kim McCone, Damian McManus, Cathal Ó Háinle, Nicholas Williams & Liam Breatnach (ed.), 1994: Stair na Gaeilge in ómós do P[h]adraig Ó Fiannachta. Maigh Nuad: Roinn na Sean-Ghaeilge, Coláiste Phádraig, Maigh Nuad.
- STIFTER, David, 2005: 'Zur Bedeutung und Etymologie von altirisch sirem', Die Sprache 45.1–2, 160–189.
- STIFTER, David, 2012: 'Gono míl und gweint mil mawrem'. In: Velizar Sadovski & David Stifter (ed.), Iranistische und indogermanistische Beiträge in Memoriam Jochem Schindler (1944–1994). Vienna: Österreichische Akademie der Wissenschaften, 377–402.
- STOKES, Whitley, 1860: Irish glosses: a medieval tract on Latin declension with examples explained in Irish, to which are added the Lorica of Gildas, with the gloss thereon, and a selection of glosses from the Book of Armagh. Dublin: University Press, for the Irish Archæological and Celtic Society.
- STOKES, Whitley (ed.), 1904: 'O'Davoren's glossary', *Archiv für celtische Lexico-graphie* 2, 197–504.
- WALSH, Paul, 1935: 'An Irish medical family Mac an Leagha', *Catholic Bulletin* 25, 646–653 (reprinted in Colm Ó Lochlainn (ed.), *Irish men of learning*. Dublin: Three Candles, 1947, 206–218).
- WILLIAMS AB ITHEL, John (ed.), & John Pughe (trans.), 1861: *The physicians of Myddvai. Meddygon Myddfai.* Llandovery: D.J. Roderic.
- WULFF, Winifred, 1926-1928: 'Tract on the plague', Ériu 10, 143-154.
- Wulff, Winifred, 1929: Rosa Anglica seu rosa medicinae Johannis Anglici. An Early Modern Irish translation of a section of the mediaeval medical text-book of John of Gaddesden (Irish Texts Society 25). London: Irish Texts Society.
- Wulff, Winifred, 1934: A mediaeval handbook of gynaecology and midwifery preceded by a section on the grades and on the treatment of wounds and some good counsel to the physician himself finishing with a discussion on the treatment of scabies. In: John Fraser, Paul Grosjean & J. G. O'Keeffe (ed.), Irish texts. Fasciculus V. London: Sheed and Ward.

Maynooth University deborah.hayden@mu.ie

Deborah HAYDEN