Hell as a Geological Construct

Margaret Burrell

Of the twelfth-century accounts in Anglo-Norman of the punishments imposed upon sinners, this paper intends to discuss two: the first is Benedeit’s *Le Voyage de Saint Brendan*, and the second, Marie de France’s *L’Espurgatoire seint Patriz*. In particular, it will look at likely geological features of the locations of hell and purgatory as described in the two texts.

In *Le Voyage de Saint Brendan*, St. Brendan prays to God that he might be permitted to see “cel paraïs / U Adam fud primes asis” (ll. 49-50) and to know of the punishments of hell:

Enfern pried vetheir oveoc  
E quels peines avrunt ileoc  
Icil felun qui par orguil  
Ici prennent par eols escuil.¹

Benedeit’s version is an adaptation of the Latin *Navigatio sancti Brendani abbatis*, dated by David Dumville from as early as the eighth century.² Not merely a translation, it expands and amplifies certain passages, most notably the recitation by Judas of the punishments he is condemned to endure in the two hells.³ It is in the *Navigatio* that the existence of two hells is mentioned. Episode XXIII tells of the monks’ sight of an island

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¹ Short and Merrilees, *Le Voyage de Saint Brendan*, ll. 65-68. Hereafter, line numbers are provided parenthetically in the text.  
² Dumville, *Two Approaches*, 87-102.  
³ For a detailed discussion of these, see Barron and Burgess, *The Voyage of St Brendan*, 69.
which is close enough to reveal that it is full of smithies, and the travellers hear the sounds of bellows, hammers, and anvils. They are then subjected to a fiery missile thrown by one of the unkempt inhabitants, which mercifully misses them. They notice from a distance that the island is on fire and that the sea is boiling. In episode XXIV, they see a dark, high mountain, which, after the cloud has cleared, is seen to be spouting flames and to be on fire from the summit right down to the sea.⁴

There is another account of the location of two hells, dating from the ninth century. It is the record of a dream-vision of Charles the Fat, after his own statement, as recounted by Jacques Le Goff in *The Birth of Purgatory*. In that account, Charles speaks of seeing former members of his family in pits of burning pitch, sulphur, lead, wax, and soot. Then his guide leads him to high, burning mountains which flow with swamps and metallic rivers. In the valley of the mountain, there are two pools, which also hold deceased family members. One contains boiling water, the other cold.⁵

What may have given rise to these descriptions of two hells which seem to have such precise physical characteristics? In *The Brendan Voyage*, Tim Severin recounts the story of his duplication of the voyage described in the *Navigatio*. In chapter 9, entitled “Island of Smiths,” Severin refers to sections XXIII to XXIV of the *Navigatio*: in episode XXIII, the attacks come from a desolate island whereas in XXIV one of the monks is lured away by devils close to a fiery mountain. According to Severin,

Most scholars agree that the *Navigatio* was probably describing the eruption of an island volcano, complete with its shattering bombardment of glowing lava, ash bombs hurling from the crater, the sulphurous stench of the eruption spread by the wind, the thud and rumble of subterranean explosions, and the heavy roar of the surface eruption. But the vital question is whether the author of the *Navigatio* was merely retelling the description of a volcano [. . .] or whether Irish monks had actually witnessed a live volcano in action.⁶

Severin’s conclusion is to locate the diabolical events off the south shores of Iceland, in particular near the Reykjaness Ridge, where, as he says, “In historic times there have been at least six submarine eruptions.”⁷ He then expresses interest in one particular island, the island of Surtsey which came into existence in 1963:

Everything I had read about that eruption — its 30,000-foot column of steam, the flying bombs hurtling 8500 feet up and splashing back into the sea, the muffled explosions

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⁴ A full translation is found in Barron and Burgess, *The Voyage of St Brendan*, 54-56.
⁵ The full account is in Jacques Le Goff, *The Birth of Purgatory*, 118-21.
as the sea invaded the underwater vents, the emergence of a new-born island — echoed the volcanic description of the *Navigatio*. The Vestmannaeyjar group had existed in Saint Brendan’s day, and once again there was the oddity of their name: they were the West Men’s or Irishmen’s Islands.\(^8\)

In episode XXIV of the *Navigatio*, the monks see a smoking mountain and one of the monks is compelled to jump out of the boat, whereupon he is carried off by demons and set on fire. Severin’s explanation for this episode is to locate the mountain under the vertical black cliffs of the Reykanes Peninsula, which are fissured into coal-like blocks or under the steep dark cliff of Dyrholaey, 320 feet high and easily the outstanding landmark on this flat and featureless coast. [. . .] As for the monk seized by “demons” and set alight, perhaps this was the fate of a crew member burned in a lava flow or who rashly trod on the thin crust of surface rock and broke through to the scalding steam underneath.\(^9\)

How secure is Severin’s identification of the descriptions of hell with volcanic events in Iceland? According to the description of volcanic activity in Iceland by Thor Thordarson and Armann Hoskuldsson,

the construction of Iceland resulted from interaction between a spreading plate boundary and a more deeply rooted mantle plume.\(^{10}\) [. . .] [It] is located at the junction between the Reykjanes Ridge in the south and the Kolbeinssey Ridge in the north. [. . .] The surface expression of the plate boundary in Iceland is the narrow belts of active faulting and volcanism extending from Reykjanes in the southwest, which zigzag across Iceland before plunging back into the depths of the Arctic Ocean of Öxarfjörður in the north.\(^{11}\)

What is especially significant is that the *Navigatio*’s account suggests that there are at least three locations close to each other where hell-like features exist. How likely is it that this should occur around the southern coast of Iceland? In answer to the question of the frequency of volcanic activity in Iceland, Thordarson and Hoskuldsson remark,

It is not easy to say how many eruptions have occurred in Iceland throughout its geological history because it is not always obvious what part of the rock sequence represents a single eruption. However, recent volcanic activity in Iceland shows that on
average there is an eruption every five years. This translates into about 200 eruptions in the past 1000 years. Using this frequency as a guide, the total number of eruptions that may have taken place since the birth of Iceland, 24 million years ago, is in the order of 5 million.\textsuperscript{12}

The phenomenon of the Surtsey eruption is not isolated; further in their book, the authors speak of a volcano at the “southernmost point of Iceland” which is “a heavily-eroded submarine volcano of the Surtseyan type,”\textsuperscript{13} and in the index of eruption types, the ninth and final type mentioned is “Surtseyan.”\textsuperscript{14} It seems more than probable that the \textit{Navigatio} refers to actual geological events.

Were there Surtseyan eruptions near Iceland around the time of the possible dating of the \textit{Navigatio}? As noted above, the dating of the \textit{Navigatio} is vague. Strijbosch dates the earliest surviving manuscripts “from the tenth century and localised in the Lotharingian region.”\textsuperscript{15} Wollin, however, says that

Author, time and provenance of the \textit{Navigatio sancti Brendani} are still hidden in the mists of history. It is no more than plausible conjecture that the \textit{Navigatio} was written in Carolingian times by an Irish monk, well acquainted on the one hand with the Vulgate, Biblical Apocrypha, late antique hagiography (e.g., Jerome and the \textit{Vitae patrum}), the \textit{Regula Benedicti} and the \textit{Physiologus}, and on the other hand with the Irish stories of seafarers (\textit{immrama}) and Otherworld journeys (\textit{echtrae}).\textsuperscript{16}

Given the uncertainty of any firm date, is there another variable which could be added to Wollin’s list?

It seems most likely that the description of the locations of hell in the \textit{Navigatio} relies on physical events witnessed by those who recounted them. As these events seem most probably to have taken place in Iceland, it is necessary to find what volcanic eruptions occurred prior to and leading up to the tenth century. In \textit{Land to the West}, Geoffrey Ashe remarks that the “first of the two volcanoes [in the \textit{Navigatio}] [. . .] is almost certainly in some barren coastal region of Iceland” and quotes Professor O’Dell’s

\begin{itemize}
\item \textsuperscript{12} Thordarson and Hoskuldsson, \textit{Iceland}, 13.
\item \textsuperscript{13} Thordarson and Hoskuldsson, \textit{Iceland}, 101.
\item \textsuperscript{14} Thordarson and Hoskuldsson, \textit{Iceland}, 193. For stunning pictures of the eruptions which gave birth to Surtsey, see Hjálmar R. Bárðarson, \textit{Ice and Fire}, especially the chapter, “Island Born in Fire,” 130-61. Thorarinsson’s article in \textit{National Geographic}, May 1965, is interesting in that it makes a specific connection between Surtsey and the Brendan legend.
\item \textsuperscript{15} Burgess and Strijbosch, \textit{The Brendan Legend}, 1-2.
\item \textsuperscript{16} Wollin, “The \textit{Navigatio Sancti Brendani},” 282.
\end{itemize}
transcription of a passage about Hekla from a medieval chronicle, at the end of which O’Dell says that “Hekla was regarded for centuries as the region of chaos round the gates of hell.”\(^{17}\) Carl Selmer also thought the most likely identification was Hekla,\(^{18}\) but there are other possibilities. Between the second half of the eighth century and the tenth century, according to *Volcanoes of the World*, the following Icelandic volcanoes erupted: Vatnafjoll (750), Hekla (750, 800), Krafla (850?), Brennisteinsfjoll (875, 910), Krisuvik (900?), Torfajokull (900?), Grimsvotn (905?), Katla (915, 950), Reykjanesfjarggur (920?), Langjokull (925), Bardarbunga (940), and Ljosufjoll (960).\(^{19}\) Of these, it is probably useful to eliminate all but those situated in the south, if Severin’s theory is correct. That leaves Vatnafjoll, Hekla, Brennisteinsfjoll, Krisuvik, Torfajokull, Katla, Reykjanesfjarggur, and Langjokull. But a further elimination is necessary to determine which of these had the Surtseyan characteristics which may have led them to be associated with a fiery island in the sea, namely, a submarine eruption resulting in a new island. Only Reykjanesfjarggur is documented as having had a submarine explosion around the date indicated, but no new island was formed, and Katla’s explosion around 950 may have been subglacial.\(^{20}\) Since 950 may be too late as a possible date for the composition of the *Navigatio*, the only likely eruption to form the basis of the description of the hells in the *Navigatio* is that of Reykjanesfjarggur, which had the necessary characteristic of being submarine.

In Benedeit’s *Voyage*, the two hells seem to be located close to each other: “Ne demurat fors al matin / Virent un lu pres lur veisin” (ll. 1183-84). If there were to be a different identification of the volcanic event from that which may have been amplified from the original *Navigatio*, the possibilities are few. From 1000 to 1100, volcanic activity in southern Iceland was confined to Katla (1000), Hekla (1050, 1104), and Krisuvik (1075, 1100), and as mentioned above, none of these had Surtseyan characteristics.\(^{21}\)

Charles the Fat’s dream-vision of two locations of hell is also likely to have had a European geological explanation. Land-based volcanic activity is known especially in the

\(^{17}\) Ashe, *Land to the West*, 90-91. The italics are his.
\(^{18}\) Selmer, *Navigatio sancti Brendani abbatis*, 90.
\(^{19}\) Simkin and Siebert, *Volcanoes of the World*, 186-87. I am indebted to Professor Jim Cole of the Department of Geology at the University of Canterbury for his help, not only in lending me a copy of this invaluable book, but also for telling me of his investigations on Surtsey. (The question marks denote uncertainty about the precise date, but the eruptions are certain; Simkin and Siebert, 15.) It should be noted that while the dating of medieval manuscripts may be imprecise within a range of centuries, for example, mid-8th to 10th century for the *Navigatio*, there are more precise data available for the dating of volcanoes.
volcanic regions of southern Italy, and several eruptions are documented off the coast of Europe within a time which could have led to the circulation of oral accounts prior to and including the ninth century. Vesuvius and Etna were particularly active: eruptions of the former occurred in 685 and 787, and of the latter in 812 (possibly), 814, and 859. In addition, Santorini, in Greece, erupted in 726, and both Lipari and Vulcano, in Italy, erupted in 729. Of these only Santorini displayed the Surtseyan characteristics of a submarine eruption resulting in the formation of a new island. Such a remarkable phenomenon must have been the subject of oral tales and fearful interpretations. Accounts would surely reach the author of the *Navigatio*, especially if he was an Irish monk, for the flourishing network of Irish-founded monastic houses throughout Western Europe would have provided a ready conduit. According to Selmer, “the home of the *Navigatio* was in the old Lotharingia of the tenth century,” as confirmed above by Wollin’s remark.

À nos moutons: what of the accounts of the tortures experienced by Judas, one of the foci of this paper? The amplification of the punishments meted out to sinners in hell as described by Judas in Benedeit’s adaptation of the *Navigatio* obviously drew upon other accounts of punishments for the damned. A very useful summary of the antecedent literature which may have influenced him appears in an article by Jude Mackley. Literary sources aside, what else may have influenced the author in his desire to amplify his material in the lively account of Judas’s torments, and in particular, to what extent may these punishments be seen to reflect geological reality?

The amplification of hell is considerable. Before the monks encounter Judas on his rock in the sea, they sail close to two extraordinary islands, both of which inspire fear in the company. They see an island which emits a terrible stench and no matter how they strive to avoid it, they are drawn to it. Brendan identifies it as “enfern” and protects them with the sign of the cross:

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Apparut lur terre truble
De neir calin e de nulble:
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23 Simkin and Siebert, *Volcanoes of the World*, 43.
24 Selmer, *Navigatio sancti Brendani abbatis*, xxxiii–xxix. Lotharingia, from the time of the Oaths of Strasbourg (842) and the Treaty of Verdun (843), had been a political football in the later Carolingian age. For the establishment of Irish monasteries under the aegis of Columbanus, see Scherman, *The Birth of France*, 212-20. The most notable was Luxeuil which was close to the border of Lotharingia and Austrasia; the map in Riché, *The Carolingians*, 365, shows the concentration of monastic houses in the region. Garrison’s chapter “Carolingian Latin Literature,” in *Carolingian Culture*, goes no further than immediately post-Charlemagne and does not mention the *Navigatio*.
25 Mackley, “The Torturer’s ‘Art’.”
But as they approach a mountain, they are assailed by a terrifying inhabitant who hurls a burning blade which, however, misses them; the place where it falls in the sea continues to burn sulphur for a long time. This is, of course, an amplification of the episode in the *Navigatio*:

Cum alouent endreit un munt,
Virent un féd dunt poür unt.
Forment fud granz icil malfez,
D’enfern eisit tuz eschalfez;
Un mail de fer en puin portout:
A un piler asez i out.
They sail on, looking back at the fiery island, seeing thousands of demons and hearing the cries of the damned, but further on another horror awaits them. They approach a mountain so high that it is surrounded by mist, where the earth is totally black, the cries of the damned are heard and, again, a stench is emitted. It is there that they lose one of the three monks who had begged to be included on the voyage; again, this passage is an extensive amplification of the *Navigatio*:

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Li venz la nef ad cunduite,
Pur quei d’iloec pregnent fuite.
Al vent portant s’en alerent,
Mais la suvent reguarderent:
L’isle virent aluminé
E cuverte de fumé.
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Malsfeiz veient millers plusurs;
Criz de dampnez oënt e plurs.
Puûr lur vent forment grant
Del fumé chi luign par l’air s’espant.
Endurerent cum melz pourent.

Eisi est d’els puis q’unt voüd
U li dampnez sunt reçoud:
En Deu ferment lur fiance,
N’i aturnent mescreance.
Vunt s’en avant, n’i dutent rien;
Par ço sevent que espleitent bien.
Ne demurat fors al matin
Virent un lu pres lur veisin:
Un munt cuvert de nublecce;
Las meineit vent par destrecce.
Vindrent i tost al rivage,
Mais mult ert de halt estage:
Nuls d’els trestuz choisir ne pout
La haltece que li munz out.
Vers la rive plus ne descent
Que la u plus amunt s’estent.
E la terre est tute neire;
Tel nen out en tut lur eire.
Pur quel chose il ne sourent,
Salt en l’uns fors; puis ne l’ourent.
Tuit unt oïd qu’il lur ad dit,
Mais sul l’abes des uilz le vit:
“Seignur, or de vus sui preiez
Pur mes pechez, bien le créez.”
E li abes le veit traire
A cent malfez chi e funt braire.

(ll. 1161-71,1177-1202)

As the smoke clears from the mountain, hell is completely revealed to the monks, and as they look back, they see the flaming blades, the fires, pitch, and sulphur:

Turnent d’illoc, ailurs en vunt;
Reguardent sei quar poûr unt.
Del fum li munz est descouverz,
Enfern veient tut aüverz,
Enfers jetet fus e flammes,
Perches ardanx e les lammes,
Peiz e sufre desque as nües,
Puis les receit, quar sunt sües.
(ll. 1203-10)

The dual location of these fiery outcrops is further explained when the monks encounter Judas. In *Navigatio* XXV, Judas reveals that he is tortured both in the centre of the mountain they have just seen and also in the depths of hell, but the precise nature of his torments is not explained; the corresponding episode in the Anglo-Norman *Voyage* mentions merely that of the hells, “L’une est en munt e l’altre en val” (l. 1339), but it is further amplified with what Burgess has described as “the brio of a torturer extolling his art.”

By asking Judas the exact nature of the torments he suffers in hell, St. Brendan fulfills one of his two quests in the Anglo-Norman *Voyage de Saint Brendan*. Only Judas knows the actual details of the punishments inflicted in the two hells, one on a mountain and the other in a valley (ll. 1335-52), and he proceeds to describe minutely the punishments accorded to each day. The very fact of their predictability and the monotony of their regularity surely add to the torment of the sufferer. It must be acknowledged that the amplification of such detail is really irrelevant to the possible geological origin of the site of the *Navigatio*, but it will be relevant to the detail of the punishments carefully chronicled in the *Espurgatoire*.

Monday is the wheel: Judas is spun while nailed to a wheel and is at the mercy of the wind (ll. 1353-58). Tuesday, in the valley, he is “shouted at by demons” (a translation once given by a student and an unforgettable piece of bathos), placed flat on spikes and then covered with weights and rocks (ll. 1359-68). Wednesday, he is returned to the mountain where he is placed in boiling pitch until he is totally covered in it, then attached to his personal stake between two fires to burn. From time to time he is placed back in the pitch to ensure that he burns more fiercely (ll. 1369-88). Thursday brings a total contrast, back in the valley. He is placed in a location so exceedingly cold and dark that he even longs for the fire (ll. 1389-98). Friday, he is flayed until he has no skin and then pushed with burning poles into a mixture of soot and salt. A new skin immediately forms, which is also flayed away. The procedure is repeated ten times, at the end of which he is forced to drink a hot mixture of molten lead and copper (ll. 1399-1410). Saturday,

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26 Barron and Burgess, *The Voyage of St Brendan*, 69.
back in the valley, he is thrown into a dark pit with an indescribable stench, but because of the molten mixture in his stomach, he cannot vomit and can only swell until his skin stretches (ll. 1411-26). In other words, the emphasis is placed upon the nature of the torments rather than their location.

As much as these torments are a tour-de-force of medieval amplification, how many echo the involvement of volcanic activity; how many concern the use of fire? Only on Wednesdays is Judas compelled to burn; the rest of the torments are not associated with anything that might involve quasi-volcanic activity. Fire, of course, is not only linked to volcanic activity, but is also a traditional element of religious teaching about hell and is relevant to the torturer’s art. Discussing the early imagery of hell, Alan Bernstein remarks that

other New Testament authors, particularly in the synoptic Gospels, explicitly evoked eternal punishment as the fate of those who persecute the church, behave immorally, or fail to accept the faith. Some passages explicitly refer to Gehenna. They describe it as fire, call it eternal, and declare it to be the fate of those found wanting at the Last Judgment.27

More surprisingly, Judas’s torments in the valley seem to require the extensive use of a pit. As Bernstein explains, there is a long tradition of locating the place of expiation within the ground. There is, for example, the passage in Isaiah 15, where sinners are taunted:

“But you are brought down to Sheol, to the depths of the Pit” [. . .].

“The depths of the Pit.” The Hebrew here is yarch’tey bor, the same place that Ezekiel assigned to Assyria (32.23) and which the Revised Standard Version translates there as “the uttermost parts of the Pit.” The extremities of the pit can mean either its farthest bounds or its depths.28

Further on, Bernstein discusses the location of Gehenna:

The separation of good and evil in the afterlife did not grow exclusively from the deepening of Sheol or the naming of areas within it [. . .]. Another place simultaneously came to exercise many of the same functions as the dishonoring pit. That place, a gully just outside the walls of Jerusalem, beyond the Potsherd Gate (Jeremiah 19.2), was a ravine called Ge-Hinnom [. . .]. The translators of the Hebrew Bible into the Greek Septuagint transliterated this name as Gehenna. Early Greek-speaking Christians used the Septuagint as their Bible and later as the “Old Testament,” and so they preserved this term. As they wrote the New Testament, they distinguished Hades from Gehenna. Some

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English translations of the Bible still preserve the reading Gehenna. [. . .] Ge-Hinnom was associated with burning, shame, and wickedness.29

The motif of the pit leads to the second text, Marie de France’s *Espurgatoire seint Patriz*. The location is to be found, as God demonstrates to St. Patrick, in some uninhabited desert in a devastated landscape, where there is a huge, round, deep pit:

> En un liu desert et guasté
> Ki de gent n’ert pas habité,
> Une fosse tute roünde,
> Si ert dedenz granz e parfunde.

(ll. 303-306)30

In that place, so it is said, “qu’iluec ert l’entrée / de l’Espurgatoire trovey” (ll. 309-10). The etymology of the name is further explained:

> Pur ço qu’iluk sunt espurgiez
> Cil ki entrent de lur pechiez,
> A nun cil lius “Espurgatoire”,
> Ki a tuz jurs iert en memoire.

(ll. 369-72)

In *The Birth of Purgatory*, Jacques Le Goff gives a brief synopsis of the plot, and recounts the last adventure of the knight, Owein:

> Finally, he comes upon a horribly foul black flame escaping from a well, in which innumerable souls rise like sparks and fall back again. The demons accompanying the knight tell him that “this is the gate of Hell, the entrance of Gehenna, the broad highway that leads to death.”31

But there is no such passage in Marie de France’s *Espurgatoire*; the passage mentions the demons who taunt Owein and tell him of his deception at the tenth torment:

> “Icele n’est mie l’entree
> D’enfer, qu’il vus orent mustree.
> Mes sachiez bien, la vus merruns:
> Le dreit enfer vus mosterruns.”

(ll. 1321-24)

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30 Marie de France, *Espurgatoire Seint Patriz*, ed. Warnke. Hereafter, line numbers are provided parenthetically in the text above.

They show him a deep river which is stinking and covered in “flame sulphrine od fumee” (l. 1330) and announce, “Veez vus la cel flueve ardant? / Del puiz d’enfer ist cele ardors” (ll. 1334-35). It is not named Gehenna, nor is it a gate: it is a pit within another pit. This motif of a pit within a pit strongly suggests some form of underground cave formation. Is this the likely geographical and geological habitat of the Purgatory of St. Patrick?

To begin to answer that, we need to examine precisely the torments narrowly avoided by Owein, who remembers just in time on each occasion to call upon the name of Jesus Christ. The first torment involves fire: the demons build a pyre and attempt to push him into it with iron hooks, but he escapes by invoking Christ’s name. The route to the second is via a dark wasteland where he is assailed by piercing cold winds. He then comes to a place where he sees people nailed to the ground with huge iron nails. The same scenario meets him at the third torment, but with the addition of fiery dragons and serpents perched on the bodies, devouring the flesh, as well as burning toads which attempt to eviscerate their victims. The fourth torment seems an anti-climax; the victims are merely nailed to the ground with burning nails. At the fifth, however, men and women are suspended over vast fires with hooks in random parts of their bodies — eyes, ears, noses, throats, hands, breasts, genitals, cheeks — and those who have fallen into the fire are variously baked, roasted, or turned on a spit. The sixth torment involves victims being spun on a wheel of fire, which has beneath it “la flame sulphrine” (l. 1124), and the seventh is located in a bathhouse:

Li pavemenz de la maisun
Fu plains de fosses envirun,
Durement lees e parfundes,
Si esteient desuz roündes;

Icez fosses dunt nus parlum
Esteient pleines, ço trovum,
De chascune licur boillant
E de chascun metal ardant.

(ll. 1189-98)

Again, there is a pit within a pit, but this has boiling fluids. By contrast, the eighth torment occurs on a mountain, where a cold wind from the north throws its inhabitant down to “un flueve freit e puant” (l. 1251). The ninth is the fiery pit which the demons inaccurately identify as the entrance to hell, and the tenth is the fiery river already mentioned.
The contrast between the punishments meted out to the arch-sinner, Judas, and the penitent knight, Owein, is obvious. For all that the location of Judas’s two hells may be volcanic in origin, there is only one where fire is specifically required. For Owein, fire is involved in at least seven of the torments, and in some cases, this is accompanied by a location of either piercing cold or unrelieved stench. Le Goff remarks on the theological consequences of such locations in the Espurgatoire: “the imagery is more the general imagery of Hell than an imagery peculiar to Purgatory. [. . .] Cold, for example, has been supplanted almost entirely by fire, whereas previously heat and cold had generally been linked in the penal imagery of the hereafter.”32 He goes on to explain that, “In Saint Patrick’s Purgatory cold figures only in the passage describing the glacial wind that whips the summit of the mountain at the bottom of purgatory. Fire, which in the twelfth century represented the very place of purgation, has superseded cold.”33 For Le Goff, fire seems to have greater associations with Purgatory than with hell, yet a comparison of the punishments of Judas with those inflicted on Owein does not confirm this. Judas, in the two hells, experiences what he summarizes as “T els calz, tels freiz” (l. 1410), yet the temperature of the location is mentioned only twice: Wednesday involves heat, and Thursday, cold. It is the cruelty of the tortures which is emphasized rather than the actual atmospheric temperature. For Owein, on the other hand, fiery locations occur more frequently than cold. It is an exaggeration to say, as Le Goff does, that “cold [. . .] has been supplanted almost entirely by fire” (emphasis added) when the ratio of heat to cold to cruelty is almost the same as that for Judas. Hell and purgatory share the same features; the only difference is that the punishments meted out in purgatory can be avoided.

What are the geographical and geological possibilities of the location of the place of purgation? The ideal location would be in limestone country (because of the caves), and near habitation either of a human kind or of stock farming (the stinking river[s] would be the product of nearby stock or human effluent leaching though underground caving systems). There would need to be a system of stalactites and stalagmites to give the impression of supernatural and possibly paradisal causes for the phenomena as described in the Burren cave system and recorded by those who first discovered the location.

Some geographical and geological sites in Ireland do match this requirement. The traditional and current location of St. Patrick’s Purgatory is Station Island in Lough Derg near Donegal.34 Le Goff relates Giraldus Cambrensis’s account of his travels in

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32 Le Goff, The Birth of Purgatory, 197.
33 Le Goff, The Birth of Purgatory, 198.
34 See, for example, Curley’s section “Saint Patrick’s Purgatory and Lough Derg” in Saint Patrick’s Purgatory, 11-19.
Ireland, described in his *Topographia Hibernica* (1188), in chapter 5 of which Giraldus gives details of an island on a lake in Ulster. The island has two parts; one is a place frequented by saints, pleasant and inviting; the other features nine holes in the earth and is the dwelling of demons. Whoever spends the night in one of the holes will be taken and tortured by the demons, but by undergoing such torments, one may be spared the pains of hell after death.35

This lake is very near a geological boundary between carboniferous limestone, which does feature cave systems, and an area of harder schists and gneisses. In support of this site is the comment by J. C. Colman, noting that there is a place in Donegal called Pul-lans, derived from the Irish “pollach,” which he says means a land full of pits or holes.36 These could well be the holes required for the pit of purgatory. The entry for St. Patrick’s Purgatory in the *Illustrated Road Book of Ireland* mentions that the lough lies “in a desolate region with hardly a human habitation in sight. A few trees on the islands, and on the south shore, tend only to accentuate the barrenness and bleakness of the surroundings.”37 In 1497 Pope Alexander VI forbade pilgrims to go there, but this was revoked by a Papal Bull in 1503, and pilgrims were further encouraged no doubt by the inclusion of the legend in the Roman Missal in 1552. The pilgrimage was again discouraged after the monastery (built perhaps in the sixth or seventh century) was destroyed in 1632 on the order of the government; and at the beginning of the eighteenth century, an Act of Parliament outlawed pilgrimages at the risk of a heavy fine.38

On the other hand, the required site would need the following features: a subterranean cave system of considerable complexity, caverns of sufficient height for explorers in the Middle Ages to interpret the phenomenon as a subterranean castle; thereafter, there would need to be a knowledge of subterranean rivers at that geological destination with the corresponding descriptive features which can be explained from the geological formation of the Irish limestone landscapes. Such a site might well be found in the area called the Burren, to the south of Galway city, in a vast area of carboniferous limestone. The *Illustrated Road Book* describes the Burren thus:

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36 Colman, *The Caves of Ireland*. I thank Professor Paul Williams of Auckland University, who is familiar with both Colman’s book and the Burren (see below).

37 *Illustrated Road Book*, 247. For a full account of the medieval popularity of the site, see Haren and Pontfarcy, *The Medieval Pilgrimage to St Patrick’s Purgatory*. A more recent description of a contemporary pilgrimage to the site is the amusing account by McCarthy in *McCarthy’s Bar*.

38 *Illustrated Road Book*, 247.
The district known as the Barony of Burren, covering some 50 square miles, in north Co. Clare, looking towards Galway Bay, is one of the strangest in Ireland, being composed of a succession of bare limestone terraces [. . .]. There are caves and underground streams in places, and also wooded valleys at the lower levels.39

In the chapter entitled “The Burren Underworld,” John Feehan quotes the geologist W. H. Stackpoole Westropp, who in 1870 described early explorers of the Pollnagol-lum-Pollelva:

Some foolhardy individuals attempted to explore them (the Burren caves), after having fortified their nerves with liberal allowances of whiskey; under the influence of the potent spirit they beheld, while in the caves, divers strange sights and visions, the description of which has quite deterred the natives from following their example.40

The chapter is illustrated with examples of cave systems in the Burren, and there is a spectacular photograph of a stalactite, with the following caption:

“Scrambling over large boulders we stood speechless in a large chamber of ample width, length and impressive height. As our lamps circled this great hall we picked out a gigantic stalactite over thirty feet in length, the only formation in the chamber, and set proudly in the middle. It is really majestic and poised like a veritable sword of Damocles.” In these awestruck words, Craven Potholing Club described their discovery in 1952 of the magnificent stalactite in Poll an Ionain, said to be the longest free-hanging stalactite in the world.41

It is clear from reading this chapter that there are many possible sites of the marvellous locations encountered by Owein. While the first person to describe the pits within pits, which are a feature of limestone cave systems, may not have been moved by spirits to see demons, the unexplainable natural phenomena were easily attributed to supernatural causes. The remarkable features of the caves of the Burren might well have been a source for the account of the demonical location of purgatory’s pit.

Instead of matching a geological location for the events described in the Navigatio, Benedeit’s Voyage, and Marie de France’s Espurgatoire, according to a possible dating of texts, this paper has sought first the dating and location of physical events which may have been a source for the texts. The dating of geological events has been refined more meticulously than the dating of some texts; in particular, the work of the volcanologists

39 Illustrated Road Book, 111.
40 O’Connell and Korff, The Book of the Burren, 27.
in dating all volcanic events within the last three thousand years to an accuracy of within fifty years for the most part, has permitted the elimination of some hitherto proposed volcanoes from the Brendan account. The description of the volcanic island within the sea in the Navigatio is undoubtedly Surtseyan in character, as Professors Cole and Shulmeister both told me in conversation; unfortunately, there is no dated Surtseyan event in the vicinity of Iceland within the likely timeframe of the construction of the Navigatio. The nearest Surtseyan event is the one which took place as the effect of the eruption of Santorini, which may have given rise to the account of the two hells in the dream vision of Charles the Fat. As for Marie de France’s Espurgatoire, the description of locations in the Burren seems to include more geographical and geological verisimilitude than the traditional location of Lough Derg. Given that Irish speleology has only relatively recently been documented, there may be other locations which comply with the “pit within the pit” motif, along with the underground caverns and spaces described in the Espurgatoire. Perhaps this paper may lead to a greater interdisciplinary curiosity to explore the possibility of other locations for the physical events described in the texts.

University of Canterbury, New Zealand

Bibliography


