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# Evidence for the use of whale-baleen products in medieval Powys, Wales

June 27, 2014

By [Lee Raye](#)

## Introduction

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© Victoria and Albert Museum, London, (T.184-1962) Baleen and cotton corset. Made c.1890-1900.

Baleen is the material which comprises the keratinous feeding plates in the mouths of the largest whales on the planet. It was traditionally used in corsets, along with other items from the late sixteenth century onwards. Historical references suggest that, prior to this, baleen arms and armour were used from the late thirteenth-fifteenth century. Baleen remains have also been microscopically identified at Perth Castle in a fourteenth-fifteenth century context (Moffat et al. 2008).

One of the earliest references to baleen in British literature, and the only reference in medieval Welsh literature is found in ‘The Dream of Rhonabwy’. The reference suggests that baleen armour may have been well known in thirteenth century Powys, Wales where the text was probably written (Lloyd-Morgan 1991, 190-192). The fact that Powys did not have a sea coast, and the potentially early date of the text, makes ‘The Dream of Rhonabwy’ an unexpected place to find the material.

## Scholarship on the date of ‘Rhonabwy’

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The story is first extant in the Red Book of Hergest (written shortly after 1382, see Huws 2000, 47). It is unique among the stories commonly translated alongside ‘the Mabinogi’ in that it is also not present in the earlier White Book of Rhydderch (c. 1350, Huws 2000, 228). The fact of the text’s single manuscript

authority, together with the story's evident literary rather than oral origin suggest that the text is the product of a sophisticated scribal class of author working around c. 1390-1482. (Giffin 1958; Carson 1974). Historically, however, the story is set in the Powys of Madog ap Maredudd, and since it seems to function as a social commentary, others have suggested it more probably originates from twelfth or early thirteenth century Powys (Richards 1948, xxxvii-xli; Charles-Edwards 1970, 266). The language of the text is consistent with this latter claim, although the author could have intentionally used archaic language (Rodway 2007, 70). The current consensus is probably best formulated by Lloyd-Morgan (1991, 190-192) who suggested that the text be dated to the late thirteenth or early fourteenth century.

Since these claims have held the attentions of scholars, other aspects of the text have been neglected. Giffin (1958) commented on the rich descriptions of horses and animal heraldry, but to my knowledge no-one has previously commented explicitly on the strange belts worn by the final three knight-messengers of the text.



Photograph licensed by Curtis Newton under CC-BY-NC-SA-2.0.

## The text

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In the dream, Owein and Arthur play a board game. While they play, Arthur's squires and Owein's raven-army fight. A series of six knight-messengers interrupt the two players, giving them updates on the battle. Each of the knights is better dressed than the knight preceding him as if the story is heading towards a

crescendo. This is reached in the form of Hyueid Unllen, a knight whose name appears to be a joke suggesting he could only afford one mantle.

The last three knights each have exotic belt buckles: The fourth knight has a belt-buckle 'o asgwrn elifant' (lit.: of elephant bone = ivory). The fifth knight has a belt-buckle 'o asgwrn moruil' (lit.: of whale bone = walrus ivory / a synonym for elephant ivory, since walrus ivory was not commonly used in Britain after the twelfth century, see Williamson 1982, 17-19). Finally, the sixth messenger, Hyueid Unllen has a belt-buckle 'o amrant moruarch' (lit.: of sea-horse's eyelash; of whale's eyelash).

This is a difficult phrase and not found elsewhere in medieval Welsh literature. No translator has departed from interpreting it as a walrus or whale's eyelash but it is unlikely to denote an ordinary whale's eyelash at all. Neither whales nor walruses have eyelashes, and even if they did have eyelashes, these would be no use for a belt buckle.

For the first time now, the phrase can be understood; the most likely interpretation of these 'amrant' (eyelashes) can be found by referring to Irish literature. Kelly (1998, 284-285) has pointed out that the Irish cognate term 'abrae' (eyelash) normally refers in this context to baleen, and probably reflects the appearance of baleen which resembles the human eyelash. The medieval belief that whale's baleen was an eyelash was apparently widespread. It was also reported for example in the *De Animalibus* of Albertus Magnus, an influential thirteenth century German philosopher and theologian (lib XXIV, cap. 1). French readers can follow along using an open access alternative translation [Moulinier](#) (1992, 120-121):

Utrumque autem duorum quae pellis sunt planae, spissum et nigrum habet corium et super oculos suos qui sunt valde magni ita quod quindecim homines large capit fovea unius oculi (et aliquando capit viginti) sunt additamenta per modum ciliorum cornea, longitudinis octo pedem et minus et plus, secundum quod piscis maior est vel minor: et haec additamenta cornea sunt in figura magnae falcis cum qua secantur gramina et sunt ducenta quinquaginta super unum oculum et totidem super alterum, et ex parte latiori radicanur in pelle et ex parte strictiori separantur, nec eriguntur ita quod rigescant porrecta de corpore, sed iacent disposita a radice oculi versus tempora piscis ita quod apparent unum os latum sicut magnum vannum, et utitur illo piscis pro coopertorio oculi tempore magnae tempestatis. (Stadler 1920, 1522-1523)

Now, each of the two [types of whale] which has a smooth skin has a flat, thick and black hide. Above its eyes (which are so big that the pit of one of the eyes [can] normally take fifteen men and sometimes it [can] take twenty), there are eyelashes fashioned like horn appendages eight feet or more or less in length, depending whether the fish is bigger or smaller than others. These horn appendages are in the shape of great scythes with which [people] mow the grass, and there are over two hundred and fifty, and the same number on one eye as over the other, and these are rooted in the skin from the widest part and these are drawn apart at the thinnest part. Nor are they raised in such a way that they are fixed extending away from the body, but they lie [rather] arranged at the root of the eye against the temples of the fish, so that they appear across the mouth as one large fan, and the fish uses this for covering [its] eyes during [each] great storm.

Resnick (1999, 1667) has shown that this passage perfectly describes the right whale (*E. glacialis*) which does have 250 baleen plates on each side of its mouth. Since the right whale's mouth curves down at the back by

its eyes, the baleen in its mouth might understandably have been thought to be the animal's eyelashes by those without any modern biological knowledge.



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Returning to Rhonabwy, it is interesting to note that the high-status 'whale's eyelash' there is described as pure-black. Only bowheads (*B. mysticetus*), right whales and blue whales (*B. musculus*) have black baleen. Of these, bowhead whales are confined to the arctic and blue whales could not have been hunted although they may have occasionally stranded. Right whales, however, may be the species intended. Right whales are so-called because when English people started hunting in the sixteenth and seventeenth centuries these whales were determined to be the right ones to hunt. They were gentle enough not to attack boats and slow enough to be easily caught (De Smet 1981). They also have the longest and most finely textured baleen of any species of whale (Reeves et al. 1982, p.431). If the author of Rhonabwy had a choice of baleen, this would be the type to choose for the fantastically-dressed Hyueid Unllen. However, strong colours are used frequently throughout 'Rhonabwy' as a marker of status. The two riders before Hyueid Unllen both had bright-black belt tongues on their belts. Conclusions based on colour may therefore be unwarranted.



© Trustees of the British Museum. Wood and baleen box (Am.6819.a-b) acquired 1870 from the Pacific north-west coast.

## Conclusion

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Despite the lack of clarity about species intended, there is a clear case that the term ‘amrant moruarch’ referred to baleen in medieval Welsh literature. Since the term is used in a popular story, a wide audience might be expected to be familiar with the term, or at the least able to recognise it as a material. Although there is not yet sufficient evidence to argue for a whaling industry or the use of raw baleen, there is enough evidence to suggest secondary baleen products were known and used.

Moffat et al. (2008) found evidence for the use of baleen sleeves, gauntlets, pauldrons and swords from the late thirteenth-fifteenth century. Although they did not find evidence of belts or belt buckles, their findings do prove the use of baleen in the arena of high-status armour. ‘Rhonabwy’ provides the first evidence for baleen belts or belt buckles, and may even represent the earliest British evidence for the use of baleen.

More generally, it has been demonstrated that ‘Rhonabwy’ has a great deal to offer scholars of the historical landscape who can look beyond the lack of consensus regarding the date of the text. For example the text appears to include a reference to the Scots pine tree at a time when the pine tree was thought to have been confined to north Britain. With or without a clear consensus about the story’s literary and historical context, the text demands an eco-sensitive re-interpretation by a researcher in the near future.

N.B. This paper was previously presented to the Mammal Society Student Conference in 2013 and the Cardiff University School of Welsh Seminar Series in 2014.

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