

The Christianization of Iceland, priests, power, and social change 1000-1300

Review Number: 212

Publish date: Monday, 1 October, 2001

Author: Orri Vésteinsson

Date of Publication: 2000

Pages: 318pp.

Publisher: Oxford University Press

Place of Publication: Oxford

Reviewer: Paul Buckland

Saga and penecontemporaneous 'historical sources' are a minefield for interpretation into which archaeologists step at their peril. Historians similarly range across this perilous landscape either confident and sure-footed in the belief that what they read is true, if often tempered with the supernatural, or as sceptics who feels that each footfall may be their last, as myth and family pseudohistory are interpreted as fact. Into this wasteland, Orri Vésteinsson strides with consummate skill. If anything siding with the sceptics, he examines the 'historical' and other written sources with a somewhat iconoclastic approach, borne of experience with an Icelandic archaeological record where the artifactual record is so poor that virtually nothing can be securely dated. Recourse to the framework provided by frequent layers of volcanic ash, as first demonstrated by Sigurður Þórarinnsson in Þjórsárdalur over fifty years ago ([Thorarinsson 1944](#)), is itself reliant upon the historical record for dating, and still leaves grounds for dispute (cf. [Vilhjálmsón 1991](#)). Whilst the actual dates of eruptions should eventually be resolved by annual snow accumulation counts in the Greenland ice cores (e.g. [Zielinski et al. 1995](#)), where Icelandic tephra rather than the disputed proxies of acidity peaks actually occur ([Buckland et al. 1996](#); [Zielinski et al. 1998](#)), direct relationships with archaeology and thereby inferred history remain less secure; the problems of how long between construction/abandonment and volcanic eruption will always remain. Such problems occur frequently in the first part of Vésteinsson's study; just how many early churches are attested archaeologically as opposed to historically, and at what date do pagan burial customs cease? The archaeological record has further problems. Whilst we can recognise some high status pagan interments from their grave goods and other attributes, pagan temples are particularly elusive, and Christian chapels lacking burial rites may pass similarly unrecognised. Vésteinsson opts for a model in which temples did not exist, although the recent discovery of cattle skulls buried beneath the turf walls of the large hall at Hofstaðir may cause him to reconsider this view ([Friðriksson et al. in press](#)). Feasting in such halls may have had a quasi-ritual implication ([Friðriksson and Vésteinsson 1997](#)), but the fact that one of the early priests, Bjarnharðr the Saxon, spent time blessing not only churches and bells but also wells, fords, lakes and cliffs (p. 21) might be taken to imply a need to sanctify previously pagan open ritual sites out in the countryside, traces of which still survive in those fragments of Icelandic folklore which are not romantic creations of the nineteenth century and later; the burials of chieftains with horses and place names like Hestavatn may have a tenuous link through the Christian ban on the eating of horse flesh.

The account of the precipitate conversion of the Icelanders following a decision taken at the Þing in AD 999/1000 provides a legitimate foundation myth for the Church, but there are saga and other references to

the earlier presence of Christians in Iceland, and the progress of christianisation is likely to have been more gradual. There remains the thorny problem of the *culdees*. Did Irish monks seek the solitude of the islands before Norse landnám, or is this merely an alternative foundation myth built by later clerics to reinforce further their hold on the land? Forging of charters was a thriving industry in the monasteries of this period, including those of Iceland (pp. 133-4), and the context of both *Landnámabók* and *Íslendingabók* would require the Church to establish its deeper roots, alongside those of the leading families. Palaeoecological research on Papey found no hermits, and suggests that little activity preceded the fall of the Landnám tephra in *ca.* 865 ([Buckland et al. 1995](#)), although [Hannon and Bradshaw \(2000\)](#) would interpret Faroese evidence differently. Dicuil's near-contemporaneous account of both Faroe and a land in the north sufficiently light at midsummer midnight to see to pick the lice from a man's shirt has to be accepted at face value. This is an area, which Vésteinsson avoids, lying outside his chosen period, although one would have liked to have known what he thought of the sources.

Whether Ari Þórgilsson's words or those handed down to his informant Teitr by his grandfather who had been present, Snorri the Lawgiver's riposte to the claim at the Alþing that the old gods' anger was evinced by news of an eruption, "at whom were the gods angry when these stones were erupted", has a strikingly modern ring to it. Much ink has been spilt over the identity of Kristjánshraun, but again foundation myth or truth, it provides a small window on the natural world, a sense of deep time, which is woefully lacking in most contemporary literature from mainland Christian Europe, where accounts of natural phenomena (*cf.* [Sigurdsson 1999](#)) derive not from direct observation but from such palimpsests as Solvinus' distillation of all that is wonderful in Pliny the Elder or the cloistered ravings of ill-informed monks. Eventually the cold hand of the Church falls over Icelandic sources as well, and Hekla becomes the mouth of Hell, turned from Nordic cold to Mediterranean heat, and its eruptions the screams of the damned. During the period of transition however, Iceland shows a literary flowering, some of it, ironically, written by priests, without parallel in the West, and these family histories, sagas, variously regarded as fact or collections of fairy stories, provide additional clues to the location of early churches, several of which have unfortunately been excavated without the benefit of modern archaeological techniques. It is unfortunate that Vésteinsson did not take the opportunity, whilst discussing these and other early ecclesiastical sites, of pulling together what excavated evidence there is and comparing these with contemporary churches in mainland Europe and Greenland; indeed, with the exception of a good set of location maps, the book is disappointingly short on illustrations.

The early part of Iceland's history is rightly regarded by Vésteinsson as its prehistory, although the term favoured in France for the Iron Age, protohistory (protohistoire), would perhaps have been more correct. Archaeology and tephrochronology provide important sources within this period, and despite scepticism elsewhere the author falls into a chronological trap at Stöng in Þjórsárdalur. The careful re-excavation of this site by Vilhjálmur Örn Vilhjálmsson located a structure beneath the main house, as well as others to the east ([Vilhjálmsson 1989](#)), beneath what [Roussell \(1943\)](#) had identified as a pantry. Vilhjálmsson has long argued that the dating of the destruction of the Þjórsárdalur farms by an eruption of Hekla in *ca.* 1104 ([Þórarinnsson 1967](#)) was wrong, and that the artefactual record suggests that occupation continued into the first half of the thirteenth century ([Vilhjálmsson 1989; 1991](#)). Vésteinsson accepts this still contentious view without comment (p.55). Much depends upon a single sherd of glazed pottery identified as 'Grimston Ware'. In her recent study of pottery in Iceland, [Sveinbjarnardóttir \(1996\)](#) is more circumspect, and uses the term 'Grimston-type Ware', but still provides a date range of the 13th to the 15th century. Caution over ascribing fabrics to sources is particularly needed when dealing with pottery manufactured in eastern England, from Holderness southwards to northern East Anglia, where the clays and temper derive from mineralogically indistinguishable Late Devensian glacial deposits; dating therefore has to rest upon when the earliest glazed wares were produced in the region. [Mainman's \(1990\)](#) work on the York material has shown that glazed ware production extends back at least to the tenth century; the small Stöng sherd can provide limited dating evidence. Of the remaining artefacts from Þjórsárdalur, only the antler combs ([Vilhjálmsson 1989](#), fig. 5) belong to a relatively short-lived type, and despite his attempts to date them later, the best parallels lie in Anglo-Scandinavian York, *ca.* 850 to the eleventh century (*cf.* [MacGregor 1982](#), fig.49). Much hangs upon the dating of the Þjórsárdalur sites, including the putative sequence of house types in the North Atlantic

region, and it is difficult to push the dating beyond the 1104/58 date favoured by vulcanologists, although they are themselves reliant upon annalistic sources. If a later date is accepted, the absence of any trace of a church is a curious feature of the Stöng site. The small farm at nearby Skeljastaðir, with the largest room only 9.5m by 4.5m, compared with Stöng's massive 18m by 6m hall with outshots, had a church and cemetery. [Vilhjálmsson's \(1996\)](#) excavations have now found a church at Stöng, under a later structure, but its burials had been removed for reburial elsewhere before the site's destruction by the eruption. Vésteinsson notes (p.53) that the desertion of a church or chapel normally required the exhumation and reburial of its dead, and this could imply that the decision to abandon the site as a permanent farm, perhaps a reduction to shieling status, had occurred earlier. As Vilhjálms (1989; 1991) has argued, the process of desertion in Þjórsárdalur may not have been occasioned by a single catastrophic event.

Vésteinsson sees the christianisation of Iceland as part of the inexorable process of microstate formation and eventual incorporation into the kingdom of Norway in 1262-4, but whether such a trajectory was inevitable without the interference of the Church is debateable, although even more remote Greenland was also christianized and incorporated. Whether squabbling subsistence farmers on the edge of the World needed Europe before the arrival of the arch-endoparasite the Church, to modify Vésteinsson's words, is doubtful. Local animism rooted in a vaguely remembered Norse pantheon fulfilled religious requirements, and the Church only provided a mechanism by which the few were able to control the many. With its acceptance, the few sought to keep as much of the tithe in family hands as possible, and Gizurr *Hviti*'s astute move in having his son Isleifr educated abroad, to become Iceland's first native bishop at Skalholt in *ca.* 1057, shows one successful attempt to control the parasite which ultimately took control of most of the good land until the Reformation presented a partial cure, too late for Greenland and in Iceland's case merely replacing largely endoparasitism with the ectoparasite of the Danish king. This perhaps appears a jaundiced view of the christianisation of Iceland, not in line with Vésteinsson's, but it fits a paradigm, which many anticlerical writers since the Reformation would recognise. Yet without Church and ultimately state control what could be the pattern? In the chaos of an independent commonwealth, independent people killed, burned and maimed in line with the social Darwinism of a code of honour more akin to Clint Eastwood and the myth of the American West (cf. [Logan 1992](#)) than the precepts of Christian 'charity', itself another myth, apparent in the fact that Olaf Trygvason took Icelandic hostages against the adoption of Christianity at the Alþing; this was hardly a free vote since many of the *goði* would have been very aware of the likely fate of their sons. It should be noted that unlike Norway, Iceland had no Stiklestaðir, and any powerful allegiance to the old gods may already have been in decline. It would, however, be to put a modern set of values on the past to suggest that prior to the acquisition of Christianity Icelanders were moving towards an agnostic viewpoint; we simply have little idea what the prevailing belief systems were, and what we have is based on a few burials, trinkets, and the post-hoc word of the eventual victors, the Christian Church. Its moralising overtones permeate the sagas, which purport to describe earlier societies, attaching reverence to myths, which translated into the films of the last great western frontier, have been termed *Hengikjöt Westerns*. Such comments may seem far-fetched, but if there are any faults in Vésteinsson's book they lie in his failure to compare Iceland and Greenland, on Europe's westernmost frontier, with events on its other borders, where Catholic Christianity came up against other pre-existing belief systems.

In the North, the Sami pattern of deposition of offerings in sacred places might parallel hoards and stray finds in Iceland; not all wealth was disposed of in winter beer and *hengikjöt*, or in the apparent miserliness of an Egil Skallagrímsson in burying his wealth, - or is the latter a poorly remembered pagan rite? We may never know, but the avenue requires further exploration, not only for its own sake, but also because of another curiosity, the acceptance in Iceland of a unique system of tithes. Elsewhere the tithe was 10% of production, but in Iceland it was a 1% property tax. Seen as usury by the Continental Church, the Norwegian envoy Loðinn leppr provides a clue to interpretation in 1281, a point noted by Vésteinsson (p.69, n.14), "You bishops claim tithe of buckles and silver girdles, buckets and bushels and other dead objects, and it amazes me that the populace tolerates such wrong from you.." Whilst Bishop Árni in his reply hides behind the cloak of an unspecified Pope Innocent approving such things, Vésteinsson suggests that difficulties in calculating yields in a pastoral economy may have led to this system. Such niceties did not trouble the

Church in similar situations elsewhere in Europe, and we may be seeing the appropriation by the negotiators of the Christian Church of a regularised system of offerings to the gods of places; the compromises went beyond infant exposure and the eating of horseflesh.

A change in gods for rural societies living close to the subsistence margin may have had less impact than an increase in taxation to either Church or ultimately King. Even if the offered explanation for the unique tithe system is accepted, there were clearly changes in the land through the late twelfth and thirteenth centuries leading to the consolidation of holdings, loss of independence by the elite, and eventual dominance of the Church. This is long after the acceptance of Christianity as essentially the state religion, but it is a reflection of what Vésteinsson sees as inevitable. The problem has been explored in another doctoral thesis, in [Jón Haukur Ingimundarson's \(1995\)](#) study of tenth to thirteenth century Borgarfjörður. His more anthropological perspective sees the changes as a result of the progressive incorporation of Iceland into a World system, whereby production is entrained to produce a surplus to enable import of elite goods. A polar bear might be exchanged for a bishop in Greenland, but the bottom line of elite survival in Iceland was the commercialisation of fisheries, stockfish to underpin urbanization and standing armies in mainland Europe. This required the organization of boats and manpower, the latter leading to a net labour deficit on farms, and the formation of another archaeological feature, the farm mound, an accumulation of debris which would previously have been spread as manure on the infield ([Buckland et al. 1994](#)). Much of this process appears to post-date Vésteinsson's period of study, although as Ingimundarson shows the seeds are already there. Such information is not directly available from the historical record, but there are hints. Why, for example, does the statement that the Orcadian earl 'Torf' Einar was the first to introduce the burning of peat to Orkney mean anything to its contemporary Icelandic audience? On the grounds of palaeoecology, if not common sense, he clearly was not, but is it a statement on local Icelandic ecology, the depleting of natural timber resources, both driftwood and birch coppice, or the sequestration of rights traditionally held in common, forcing formerly independent farmers to the demeaning task of digging turves rather than cutting timber? Both explanations may be correct and be tied up with the absence of men at critical times of the year for such tasks. Despite Björn Þórsteinsson's idealistic view of the past, rightly criticised by Vésteinsson (p. 54-55), Iceland was never an egalitarian society, as the archaeology, without history, clearly shows. The imposition of Christianity, however, had an ecological dimension, changes in the yearly round not considered by Vésteinsson. In addition, despite the loss of innocence occasioned by such studies as [Cronon's \(1983\)](#) of pre-Columbian impacts on 'natural landscapes' in New England, Christian attitudes to natural resources appear fundamentally different to those that went before, and exploitation on the basis, still largely current and fostered by Right-wing American Republicanism, of SEP, Someone Else's Problem (cf. [McGovern et al. 1988](#)), was begun.

This is a story to which the palaeoecological record can contribute significantly. Ari Þórgilsson's oft quoted remark about Landnám forest extending *milli fjöllum og ströndum* has been amply supported by the palynological record (e.g. [Hallsdóttir 1987](#)), and the fate of Iceland's soils was pointed out by Þórarinnsson over forty years ago ([Þórarinnsson 1961](#)). More recent work has refined the picture. In Eyjafjallasveit, where the tephra stratigraphy is particularly complete and well studied, Dugmore and others have been able to show that, whilst much soil loss from middle range outfields is post-medieval ([Dugmore and Buckland 1991](#)), the more marginal areas were suffering much earlier ([Simpson et al. 2001](#)). On Papey, the palaeoecological record shows farm abandonment, perhaps consolidation into a single holding, before the mid-thirteenth century ([Buckland et al. 1995](#)). Whilst [Sveinbjarnardóttir \(1992\)](#) has urged caution in the use of over-simplistic models of farm abandonment, the questions still need to be asked as to whether the climatic, historical, archaeological and palaeoecological records might combine to impose some sort of environmental determinism on the path of Christianity in Iceland. The close correlation between climate, productivity and survival has recently been extensively explored (cf. [Ogilvie and Jónsson 2001](#)). Did the offer of hay today and hay tomorrow, admittedly in the afterlife, provide some degree of certainty after a run of poor years? Such speculation lies with the post-processualists rather than the neopragmatists of science, but the approach of historical ecology (cf. [Crumley 1994](#)) requires us to ask such questions of the historical and palaeoecological records, and then devise models that can be tested. Over ten years ago, the noted

historian Gwyn Jones remarked that there was nothing new that the historical record could offer us concerning Norse expansion. He might wish us to reconsider on reading Vésteinsson's study, but further archaeological research excavation can only be justified when supported by a full range of palaeoecological techniques, not all of which can be site-based (*contra* Andrews and Barrett 2000), and there is no doubt that these may answer some of his remaining questions, including at least the bare bones of what took place in the chieftains' halls (p. 8) (cf. [Simpson et al. 1999](#)).

Vésteinsson ends his study in the late thirteenth century, and it is unfortunate that he did not choose to continue into the following century. By then the medieval Church had begun another sea change, from one of hope and expansion to one of increasing pessimism and control, no *hengikjöt* in this World and original sin leading to precious little hope of any in the next. In the past, following [Huizinga \(1924\)](#), many historians have related this to the trauma of the Black Death, but the change has an ecological base, which begins much earlier. A run of bad years culminated in a famine in 1315-6, which was reported from the Reykjanes Peninsula of western Iceland to the Urals ([Abel 1980](#)). Christian Europe was in retreat and marginal lands were increasingly abandoned. In Greenland, the power of the Church in resisting innovation and change in the subsistence base may have proved fatal ([McGovern 1980](#); [Barlow et al. 1998](#)). Settlement in Iceland survived, although there were many and progressive marginal losses. Changes in the subsistence base did take place, more seals appear to have been taken in the north ([Amorosi 1992](#)), and the key into mainland Europe provided by the stockfish trade must have enabled many to exist off the tailings of fishing, but Icelandic success measured against Greenlandic failure still reflects the stranglehold of the Church. Unlike Greenland, in Iceland, hunting of sea mammals and fish did not require an alien technology borrowed from the expanding pagan Inuit. By the fourteenth century the hold of the Church was complete.

The latter part of Vésteinsson's book is more strictly historical, dealing with the processes, which eventually separated ecclesiastical and secular power. Chieftains ceased to see advantages in being ordained, and priests, largely as in the rest of western Europe drawn from those sons who were not to inherit, began their shift in allegiance through neutrality to the support of the monolithic and increasingly affluent Church. This is a much more difficult section for those less familiar with Icelandic history, and the parallels with the similar struggles being played out in mainland Europe could have been better developed. *The Christianisation of Iceland* should established Orri Vésteinsson as a significant figure in the study of Icelandic history, and his involvement with archaeology places him in a unique position to integrate the various lines of evidence. It should be added that the book also provides a series of parallels for the less documented events leading to the adoption of Christianity in England and elsewhere in northern Europe. Historians, and archaeologists, have much to learn from reading it, and adopting a lateral way of thinking.

October 2001

[Abel, W. \(1980\)](#). *Agricultural fluctuations in Europe, from the thirteenth to the twentieth centuries*. London, Methuen and Co.

[Amorosi, T. \(1992\)](#). Climate impact and human response in Northeast Iceland: Archaeological investigations at Svalbard. *Norse and Later Settlement and Subsistence in the North Atlantic*. C. Morris and J. Rackham (eds.). Glasgow, Dept of Archaeology, University of Glasgow: 103-138.

[Barlow, L. K., Sadler, J. P., Ogilvie, A., Buckland, P. C., Amorosi, T., Ingimundarsson, J. H., Skidmore, P., Dugmore, A. J. and McGovern, T. H. \(1998\)](#). Ice core and environmental evidence for the end of Norse Greenland. *The Holocene* 7: 489-499.

[Buckland, P. C., Dugmore, A. J. and Edwards, K. J. \(1997\)](#). Bronze Age myths? volcanic activity and human response in the Mediterranean and North Atlantic region. *Antiquity* 71: 581-593.

[Buckland, P. C., Edwards, K. J., Blackford, J., Dugmore, A. J., Sadler, J. P., and Sveinbjarnardóttir, G. \(1995\)](#)

- . A question of Landnám: pollen, charcoal and insect studies on Papey, eastern Iceland. *Ecological relations in historical times*. R. Butlin and N. Roberts (eds.). Oxford, Institute of British Geographers, Blackwell: 245-264.
- [Buckland, P. C., Gerrard, A. J., Sadler, J. P. and Sveinbjarnardóttir, G. \(1994\)](#). Farmers, farm mounds and environmental change. *Münchener Geographische Abhandlungen* **B12**: 7-29.
- [Cronon, W. \(1983\)](#). *Changes in the Land. Indians, colonists and the ecology of New England*. New York, Hill and Wang.
- [Crumley, C. \(ed.\)](#) *Historical Ecology*. Santa Fe: School of American Research Press.
- [Dugmore, A. J. and Buckland, P. C. \(1991\)](#). Tephrochronology and late Holocene soil erosion in south Iceland. *Environmental Change in Iceland Past and Present*. J. K. Maizels and C. Caseldine (eds.). Dordrecht, Kluwer: 147-161.
- [Friðriksson, A. and Vésteinsson, O. \(1997\)](#). Hofstadir revisited. *Norwegian Archaeological Review* **30**(2): 1-10.
- [Friðriksson, A., Vésteinsson, O., Snæsdóttir, M. and McGovern, T. H. \(in press\)](#) Recent investigations at Hofstaðir, northern Iceland. *Medieval Archaeology*..
- [Hallsdóttir, M. \(1987\)](#). *Pollen analytical studies of human influence on vegetation in relation to the Landnam Tephra layer in Southwest Iceland*. Lundqua Thesis **18**.
- [Hannon, G. E. and Bradshaw, R. H. W. \(2000\)](#). Impacts and timing of the first human settlement on vegetation of the Faroe Islands. *Quaternary Research* **54**: 414-413.
- [Huizinga, J. \(1924\)](#). *The waning of the Middle Ages*. (repr. Harmondsworth, Penguin. 1968).
- [Ingimundarson, J. H. \(1995\)](#). *Of sagas and sheep: toward a historical anthropology of social change and production for market, subsistence and tribute in early Iceland (10th to the 13th century)*. Dept. of Anthropology, University of Arizona: (355pp.).
- [Logan, L. \(1992\)](#). The geographical imagination of Frederic Remington: the invention of the cowboy West. *Journal of Historical Geography* **18**: 75-90.
- [McGovern, T. H. \(1980\)](#). Cows, Harp Seals, and Church Bells: Adaptation and Extinction in Norse Greenland. *Human Ecology* **8**: 245-275.
- [McGovern, T. H., Bigelow, G. F., Amorosi, T., and Russell, D. \(1988\)](#). Northern islands, human error, and environmental degradation: a preliminary model for social and ecological change in the medieval North Atlantic. *Human Ecology* **16**: 45-105.
- [MacGregor, A. \(1982\)](#). *Anglo-Scandinavian finds from Lloyds Bank, Pavement, and other sites*. Archaeology of York **17/3**. London, Council for British Archaeology and York Archaeological Trust.
- [Mainman, A. J. \(1990\)](#). *Anglo-Scandinavian pottery from Coppergate*. Archaeology of York **16/5**. London, Council for British Archaeology.
- [Ogilvie, A. E. J. and Jónsson, T. \(2001\)](#) "Little Ice Age" research: a perspective from Iceland. *Climatic Research* **48**: 9-52.
- [Roussell, A. \(1943\)](#). Stöng, Þjórsárdalur. *Forntida gårdar i Island*. M. Stenberger (ed.). Copenhagen: 72-97.

[Sigurdsson, H. \(1999\)](#). *Melting the Earth. the history of ideas on volcanic eruptions*. Oxford, Oxford University Press.

[Simpson, I. A., Dugmore, A. J. Thomson, A., and Vésteinsson, O. \(2001\)](#). Crossing the thresholds: human ecology and historical patterns of landscape degradation. *Catena* **42**: 175-192.

[Simpson, I. A., Milek, K. B. and Guðmundsson, G. \(1999\)](#). A re-interpretation of the great pit at Hofstaðir, Iceland, using sediment thin section micromorphology. *Geoarchaeology* **14**: 511-530.

[Sveinbjarnardóttir, G. \(1992\)](#). *Farm abandonment in medieval and post-medieval Iceland: an interdisciplinary study*. Oxford, Oxbow Monograph.

[Sveinbjarnardóttir, G. \(1996\)](#). *Leirker á Íslandi. Pottery found in excavations in Iceland*. Reykjavík, Hin íslenska fornleifafélag and Þjóðminjasafn Íslands.

[Thorarinsson, S. \(1944\)](#). Tefrokronologiska Studier på Island (Thjórsárdalur och dens Förödelse). *Geografiska Annaler* **26**: 1-217.

[Vilhjálmsen, V. Ö. \(1989\)](#). Stöng og Þjórsárdalur-bosættelseens ophør. *hikuin* **15**: 75-102.

[Vilhjálmsen, V. Ö. \(1991\)](#). The application of dating methods in Icelandic archaeology. *Acta Archaeologica* **61**: 97-107.

[Vilhjálmsen, V. Ö. \(1996\)](#). Gård og kirke på Stöng i Þjórsárdalur: reflektioner på den tidligste kirkeordning og kirkeret på Island. *Nordsjøen: Handel, religion og politikk. Karmøyseminaret 1994 og 1995 (Stavanger)*. J. F. Krøger and H.-R. Naley (eds.) : 119-139.

[Zielinski, G. A., Germani, M. S. Larsen, G., Baillie, M. G. L., Whitlow, S., Twickler, M. S. and Taylor, K. \(1995\)](#). Evidence of the Eldgjá (Iceland) eruption in the GISP2 Greenland ice core: relationship to eruption processes and climatic conditions in the tenth century. *The Holocene* **5**: 129-140.

[Zielinski, G. A. and Germani, M. S. \(1998\)](#). Correction. New GISP2 ice-core evidence supports 17th century BC date for the Santorini (Minoan) eruption. *Journal of Archaeological Science* **25**: 1043-1045.

[Þórarinnsson, S. \(1961\)](#). Uppblastur á Íslandi í ljósi öskulagarannsóknna. *Arsrit Skogræktarfélags Íslands* (1961): 17-54.

[Þórarinnsson, S. \(1967\)](#). *The Eruptions of Hekla in Historical Times. A Tephrochronological Study. The Eruption of Hekla 1947-48*. Reykjavík, Vísindfélag Íslendinga. I.

Other reviews:

[2]

Source URL: <https://reviews.history.ac.uk/review/212#comment-0>

Links

[1] <https://reviews.history.ac.uk/item/1229> [2] <https://reviews.history.ac.uk/>