

# Hospitality, debt, and land tenure in Viking Age Iceland

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## Materializing and Embodying Debt

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### Abstract

Debt and credit exist in a variety of forms in both capitalist and pre-capitalist societies. In capitalist societies, where credit and debt are foundational, there are three basic kinds of credit: consumer, trade, and bank. Trade credit is probably most aptly applied to pre-capitalist societies. Even today trade credit is not usually under the control of government authorities and can arise simply from the delay of paying bills or as a more formal arrangement between parties. Trade credit and the corresponding debt need to be thought of as property rights. Property rights, in the modern sense are exclusive, transferable, alienable, and enforceable. In pre-capitalist societies these rights can be quite weak. In this paper we explore the strength of property rights in credit and debt during the Viking Age colonization of previously unoccupied Iceland.

The Icelandic Sagas describe a violent society in which people raid, steal, and fight when abroad, but when back home offer amazing hospitality to strangers. Hospitality, as a Viking institution, begins a cycle of credit and debt that contrasts with the "Viking" stereotype. We will describe how hospitality and other low cost extensions of credit create a weak debt. Under expansive conditions in Iceland, these weak debts were turned into stronger land tenure systems. We describe how debts and land tenure systems create a patchwork settlement pattern of conflicting interests. When the landscape is filled, the debts of the system became overwhelming resulting in stagnation of many aspects of the medieval Icelandic economy.

## Introduction

Viking economics is a story of violence, plunder, inequality, feud, and, strangely enough, stability. Economists usually model violent lawless societies as having relatively low productivity as a result of fear of plunder and violence (low-level equilibrium, in economic terms). However, this was not the case during the Viking Age. Viking society in general was highly productive and stable, and at the same time, quite violent. We argue that debt was the key for creating stable property rights and therefore making the society generally productive. In short, because one could not steal a debt, debt was the currency of the Viking Age.

Many economic historians have appealed to repeat interactions between individuals and the formation of coalitions and guilds to explain the rise of trade and other institutions of property rights in lawless societies (Greif 1993; Greif, et al. 1994; North 1981). This kind of game theory, with multiple interactions that punish individuals who cheat or free ride, is an effective explanation for the development of institutions of trade in societies where violence is limited. In Viking society where, according to the sagas, deadly violence was common and force routine, repeated interactions were limited. In fact, most repeat interactions described in the sagas are deadly family feuds (e.g., Byock 1982) rather than positive trade interactions. The high level of violence is also attested to in some of the burial records (Walker, et al. in press). To explain the rise of property rights during the Viking age we must look to institutions that create stability without repeated interactions. Viking Age hospitality is precisely such an institution.

## Iceland

Iceland is kept temperate by the North Atlantic Drift of the Gulf Stream. This volcanic island was one of the last large land masses to be settled, starting in about AD 870. The Viking settlers were chieftains, wealthy farmers, and their retainers who were fleeing state consolidation in Norway under Harold Finehair. The settlers' and their descendants' stories (called sagas) were written down several hundred years after the events they chronicle; although they have the appearance of objective narratives, they are clearly politically motivated (Smiley and Kellogg 2000). Nonetheless, the sagas describe the political, economic, and social interaction of chiefs, farmers, and slaves (Durrenberger 1992). There are also historical sagas (McGrew, et al. 1974; McGrew and Þórðarson 1970) that describe the increased territoriality and violence that marked the transition between the chiefly society and the manorial state.

Early Viking Age Iceland is usually classified as a stateless, hierarchically-organized society (Bigelow 1989, 1991; Byock 1982; Durrenberger 1989; Einarsson 1994; Friðriksson 1994; Gelsinger 1981; Hastrup 1985, 1990; Herschend 1994; Jóhannesson 1974; Logan 2005; McGovern 1990; Miller 1990; Pálsson 1992; Sawyer and Sawyer 1993; Smith 1995; Sölvason 1991; Vésteinsson 1998) that fits into the

broad category of chieftom (Sigurðsson 1989:91; Þorláksson 1989:12). The chieftom is characterized by a kin-based organization that can control production and distribution of goods and/or provide security (Sahlins 1963, 1972; Service 1962). The sagas give the impression that the early households were independent centers of production. Icelandic chieftaincies were semi-hereditary, and the chieftains had to vie with each other for followers. Traditionally the Icelandic chieftaincies were non-territorial and farmers could choose to which chief (within their area) they would give allegiance.

## Hospitality

Hospitality in the Viking Age is considered an important attribute of an individual in a society focused on codes of honor and prowess in battle (Roesdahl 1998). The giving and receiving of hospitality is mentioned in numerous sources. Foremost of these sources is the Poetic Edda, the main source of our understanding of Viking mythology (Hollander 1962). In the *Hávamál*—part of the sayings of the high one, or one-eyed one (Odin)—hospitality is described in its dual nature.

[1] Within the gates | ere a man shall go,  
(Full warily let him watch,)  
Full long let him look about him;  
For little he knows | where a foe may lurk,  
And sit in the seats within.

[2] Hail to the giver! | a guest has come;  
Where shall the stranger sit?  
Swift shall he be who, | with swords shall try  
The proof of his might to make.

[3] Fire he needs | who with frozen knees  
Has come from the cold without;  
Food and clothes | must the farer have,  
The man from the mountains come.

[4] Water and towels | and welcoming speech  
Should he find who comes, to the feast;  
If renown he would get, | and again be greeted,  
Wisely and well must he act.

This poem suggests that in the Viking Age hospitality is inherently compatible with violence, and inherently unstable rights. Both the guest and host should beware of each other, but the host should offer ample hospitality. This dual nature can also be seen in the Anglo-Saxon word *gæst* which means both guest (in the modern sense of hospitality) and enemy (Bosworth and Toller 1976:357).

In the *Landnámabók* (Hermann and Edwards 1972), which describes the settlement of Iceland, there are numerous examples of secondary settlers (emigrants who arrive after most of the land has been claimed) who were taken in upon arrival

under the general rule of hospitality. While these accounts may be unreliable (Christiansen 2002) they are suggestive.<sup>1</sup> The stories detail how some of the early settlers spent their first winter in Iceland with the original settler of Iceland, Ingolf. These later settlers, such as Helgi Bjolan, then claim land with the explicit permission of Ingolf (Smith 1995). There several areas of apparently controlled settlements (Herschend 1994) like Ingolf's region around modern day Reykjavik. There are examples of partial control and hospitality such as when a man named Crow-Hreidar wrecks his ship in Skagafjörður and is invited by Havard the Heron to spend the winter. Havard the Heron then helps Crow-Hreidar to claim land under the guidance of a local chief, rather than fight a neighbor for land (Pálsson and Edwards 1972). While the most common description is of a farmer and his retinue establishing and living on a land claim, without any hospitality or help, many settlers did receive hospitality upon arrival.

The virtue of hospitality is played out in many of the Icelandic family sagas that take place after the settlement. At the beginning of the *Saga of the Confederates* (Ellison 1997) Ofeig is described as: "a very wise man and a shrewd advisor. He was a man of distinction in every respect, but was not well off financially, because he had extensive lands but not so much cash. Although it was quite a struggle to supply the needs of his household, he denied no one hospitality." In *Valla-Ljot's Saga* (Acker 1997:141) Thorgrim offers enemies hospitality during a terrible snowstorm and insists that their differences "were not [my] affair, and I intend to treat them well who deserve no harm for me, and I expect other men to behave well towards my guests." In *Njal's Saga* (Magnusson and Pálsson 1960) hospitality is used for all sorts of contradictory and complicated maneuvers: first the offering of hospitality is used as a trap, and later, the offer of hospitality is used to defuse a feud. In most cases, however, hospitality is simply given and accepted and seen as a virtue. According to the author of *Eyrbyggja Saga*, a women named Geirrid "had her house to be built across the high road so that all were obliged to ride through it. A table set with food, which was given to every one who wanted it, always stood ready. Owing to this she was looked on as a high-minded woman" (Hermann and Edwards 1989). Hospitality was integrated into other forms of exchange; for example, in the *Saga of the Greenlanders*, a seeress will not say why a farm region is suffering until she has been hosted for the night. Foreign traders were often hosted overwinter in between trips to and from the continent and itinerate traders were often hosted for the night before engaging in any trade (Byock 2001).

### Hospitality in a violent world

Most scholars distinguish between the kind of hospitality described above (i.e., given to any traveler who passes by) and feasting (Simms 1978). Feasting is a celebration where guests are invited for several days. Descriptions of feasts range

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<sup>1</sup> Christiansen (2002:226) suggests that the hundreds of separate landfalls described in *Landnámabók* is not supported by the archaeology. Our small complete settlement pattern, described below, is entirely consistent with these small independent settlements.

from weddings as in *Njal's Saga* (Magnusson and Pálsson 1960) to feasts during Viking expeditions (Sturluson, et al. 1966). For these kinds of feasts, gift giving or return feasting is not uncommon. For example, in the *Saga of Finnbogi the Strong*, the narrator says that “after the feast Thorgeir gave large gifts. He gave his kinsman Finnbogi five stud horses, dandelion yellow in color. It was said that they were the best horses in Nordlendingafjording” (Bachman and Guðmundur 1990). The importance of feasting in the Viking Age has been much studied (Byock 2001; Durrenberger 1989; Miller 1990). Hospitality is not in the same tradition as feasting and hospitality has not been understood to be central to creating networks and alliances. Furthermore, hospitality is regulated and prescribed by a series of cultural norms: under what conditions you give hospitality and receive it (e.g., only stay for three nights or less).

Besides hospitality and feasting, there are other forms of the basic physical arrangement of feeding and sheltering guests (Gautier 2009; Peyer 1987). Specifically described in medieval texts, there is an arrangement where by a lower class member must give hospitality to upper class members (e.g., feeding, provisioning horses, billeting of soldiers). Some have argued that this “sovereignty hospitality” should be thought of as a tax (Gautier 2009). In Ireland, the duty to provide this to people of higher status developed over time (Simms 1978). Conversely, in England, the duty to create feasts for visiting dignitaries and land owners seems to have decreased over time, possibly replaced by the more formal system of taxation (Gautier 2009).

Feasts and sovereignty hospitality are dependent on already existing inequities and stable property rights. Hospitality does not depend on these preconditions and is therefore is a candidate for a foundational institution. On first reading, hospitality, as presented, may sound like it is diametrically opposed to survival in a violent world where property rights are difficult and expensive to enforce. Why would anyone offer hospitality in such a violent world? Offering hospitality to a bunch of Vikings – you’ve got to be crazy. But remember, these are Vikings. You can offer hospitality to them, or they will take it (Miller 1986). Might as well offer it. Conversely, if the visitor understands that the host should offer hospitality, the visitor may not be initially inclined toward violence. One must understand that Viking hospitality is only valid within the Scandinavian cultural sphere. When Scandinavians went a-viking (to go and plunder) they did not expect any hospitality.

### Formal economics

Within the Scandinavian sphere, however, hospitality is akin to an equal allocation institution, like “you cut, I choose” (sometimes called divide and choose). Hospitality encourages travelers to present themselves occupants without violence, and commands occupants to yield food and shelter. This hospitality (divide and choose) institution works without repeat interactions. Without this institution, travelers would act like – well like Vikings – and invade whichever was the potentially weakest household, and lots of violence would ensue.

The giving and receiving of hospitality does not inherently incur any specific credit or debt. The giver of hospitality is rewarded with a good reputation and called virtuous (Kerr 2002). While the roles may later be reversed, there is no expectation particular to their transaction. Hospitality should be given and received by all equally. The receiver of hospitality does not necessarily owe a specific debt to the host. There is however a general debt, that is important in its power to reduce violence. The institution of hospitality is an adaption to a violent environment, where travel is important and common. That being said, there are examples where the giving of hospitality does lead to marriages and other alliances. The sagas also imply that the receivers of hospitality were, in any future dealings, favorably inclined toward their host, but all on an ad-hoc basis. Thus, we believe that the giving of hospitality does yield some small debt on the part of the guest, but in and of itself, the debt is not substantial enough to be used directly in economic or social activities.

In this unregulated violent world, Viking hospitality has some important features in common with modern trade credit that can help us to understand why Viking hospitality works. In formal economics, trade credit is the credit extended from one business to another during routine business transactions (Bannock, et al. 1992). In some ways trade credit is the B2B version of a Maussain gift (Mauss 1954), without the gift name. That is, goods and services are delivered without immediate repayment, but payment is expected at a future date. In capitalist societies, marginally similar to a Moka (Strathern 1971), the timing of repayment can affect the amount of repayment (e.g., net payment in less than 10 days is subject to a 10% discount while payment after 30 days is subject to interest). In the modern economy, trade credit, and the associated debt, is an entirely unregulated and critical source of funding and liquidity.

Trade credit reduces transaction costs (Smith 1987) in several important ways. First, and most broadly, trade credit helps solve problems of asymmetrical information, especially over repeated interactions. The more rapidly a buyer pays, the less risky the buyer probably is and the more credit can be extended. Buyers who take longer to pay, and therefore incur interest and/or a penalty, may be riskier. Second, trade credit forces sellers to make an investment into buyers' businesses, essentially loaning them money between the time the goods are received by the buyer and seller receives payment. Conversely, trade credit encourages sellers to deliver high-quality goods, since the buyer will have ample time to thoroughly investigate the delivered goods. We think that in several important ways, Viking age hospitality resembles trade credit. Overall, trade credit is an institution that helps buyers and sellers get to know each other without great risk on either side and helps foster good will all around.

First and foremost viewing Viking hospitality solves an important property right issue in a violent society. Any Viking Age individual who accumulates excessive stores of food, and wealth items becomes ripe for plundering. Giving hospitality,

while reducing that store of food, turns that store of food into good will. Good will cannot be plundered and stolen, so in some ways hospitality is safer form of wealth than the wealth itself—at least among Vikings.

Second, in trade credit, the goods or services delivered are worth more to the buyer than to the seller. In Viking hospitality, the hospitality given may be of relatively little marginal value to the host, but a matter of life and death to the guest. In Iceland a traveler without food, warmth and shelter could well die, while to the host, the cost of hospitality (assuming a peaceful guest) is relatively small. This asymmetrical value of hospitality to the guest also makes the system self-reinforcing, again, without the necessity of repeated interactions. However, repeated interactions would greatly magnify the self reinforcing nature of the institution and increase the value of the weak debt.

Third, the giving of trade credit means that the seller is invested in the buyers' business. The situation is analogous to Viking hospitality. Assuming that the guest received good hospitality and all other things are equal, the guest would be more inclined to guard the safety of the host. Again, this relationship adds to the self-reinforcing nature of the institution in a violent world.

### **The settlement of Iceland: Using hospitality to create property rights and the advantages to being first**

We believe that the hospitality of the first settlers of Iceland towards later settlers created tremendous advantages for the first settlers and structured the process of land claim and land division. As mentioned above, later settlers, in various parts of the island, are specifically mentioned as having received hospitality from earlier settlers. The main source, the *Landnámabók* (Hermann and Edwards 1972), was written several hundred years after the fact, so the specifics are dubious, but the pattern is suggestive.

The problems and advantages to being first, for securing property rights and the resulting economic activity, have been widely explored in the economic history literature (Barzel 1989; Friedman 1979; Glazer 1985; Greif 1993; Greif, et al. 1994; Lueck 1995). Sometimes called first-mover advantage, the idea is that the initial occupant of the market segment can control the resources. This initial control can, in some cases, make the first mover paramount long after the initial entrance. This first mover is different from Ricardo's (1817) idea that the first settlers will take the best land which will create larger rents (profits) for those first occupants. Ricardo aside for the moment, there are in fact many disadvantages to being first. During a land rush, much of the initial profits would be dissipated. For one thing, maintaining property rights over the newly claimed resource are expensive (Allen 1991; Haddock 1986; Umbeck 1981). This would be particularly true during the Viking settlement of Iceland. Protecting one's land from later entrances would be particularly difficult, given their tendency toward violence and that after sailing



halfway across the North Atlantic Ocean with a ship full of family and livestock they were unlikely to return home.

Using the institution of hospitality early settlers could have solidified their property rights. By receiving hospitality upon arrival, later settlers would have been forced to recognize the property rights of the host. Accepting the food and shelter that came from the host and were derived from the farm, helped to identify and solidify the property right of the host to the farm. This small debt, owed to the earlier settlers by the later settlers would have had dramatic implications for long-term social inequality of the society. In a land abundant world, first settlers could afford to give away parts of their nominal claims, especially if attempting to enforce them risked violence. In accepting the authority of earlier settlers to offer lands for settlement new comers bought into the system and acknowledged the initial gift of land as fundamental to their own property rights.

### Archaeology

For the last 8 years we have been conducting a settlement survey of a small relatively homogeneous area of Skagafjörður, in northern Iceland. Using a protocol of coring shallow geophysics, test excavations, and large areal excavations, we have just finished the first complete settlement survey in Iceland (Figure 1). The results of this settlement survey show a profound correlation between early arrivals and long-term success (Figure 2).

Figure 3 shows the correlation between the earliest date of settlement and the log of the size of farm mound in 1100 AD, some 230 years after the beginning of settlement. The farm mound is the pile of buildings and midden that has been built up. Here we use farm mound size as a proxy for total farm population. This measure of farm mound size is relatively easy to calculate in Skagafjörður because of an easily identifiable white tephra layer that fell in 1104 AD and covers almost everything (Figure 4).

We find it highly significant that the natural log of the farmstead area is even more correlated with the earliest date. We think it implies not just that the farms are occupied longer, and therefore have bigger farm mounds, but that the later ones are never able to attract the levels of population and activity that the earlier farmsteads are able to.

The one exception to this pattern is the farm of Glaumbær, which is relatively late, given its large size. This is interesting, because the *Saga of the Greenlanders* (Magnusson and Hermann 1965) specifically mentions that Glaumbær was founded by those returning from Vinland, tremendously wealthy after their adventures. The wealth of the other farms in this graph was probably derived from the soil and other local natural resources. We think that Glaumbær is the exception that proves the rule: the earlier the farmstead is established, the larger its population. Glaubaær as an exception shows that it is possible—in a short period of time—for a farm mound to



become quite large. In Less than 100 years Glaumbær matches the size of the second and third largest farmsteads, which were founded during the very early years of the settlement.

Other than Glaumbær, there would appear to be tremendous advantages to being first, at least in this small area of the fjord valley. The richest farm in the region (not part of our survey area) is the Bishopric at Hólar, an order of magnitude larger than the largest farm here (Reynistaður), but probably founded even later than Glaumbær. Still, on a local scale, where differences in agricultural potential between farmsteads were probably minimal, there would appear to be tremendous advantages to being first. How could these early farmers have maintained their property rights in the face of the stream of emigrants as well as sons and daughters from other established farms?

There are good reasons for the instability of property rights in Iceland during the immediate settlement. Although Icelandic farmsteads were probably not targets for raiding by other Vikings, they could have been. These early farmsteads fit Gilman's (1981, 1990) description of locked-in farms that were easy prey for a protection racket. These farmers would have been locked to partially improved land (Adderley, et al. 2008; Bolender 2006) with valuable stock of easily rustled sheep.

We argue that an important way to overcome the inherent instability of property rights, that must have existed during the Vikings Settlement of Iceland, was with hospitality. That these early farms would yield hospitality, even if they did not have much, creates debts, almost unnoticed within the society. The hospitality acts as a form of trade credit, and legitimizes the property of the earlier settlers. The small debts entailed in accepting hospitality from earlier settlers may have helped smooth the way to an orderly, and dispersed, infilling of the new land. For both sides, hospitality would have helped negotiate a potentially disastrous situation: for earlier settlers the threat of raid from more recent emigrants; for newcomers assistance in the first year – getting access to lands, building farmsteads, and keeping precious breeding stock alive through the winter – was essential to survival. Hospitality may seem to be an unreliable social rule to rely on under these extreme circumstances, but it is exactly at these dire straits that hospitality works, especially when there was plenty of land for everyone. We imagine that the small debts from hospitality are the currency that the earliest farms use to create property rights and eventually convert them to status and finally social stratification.

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## Figures

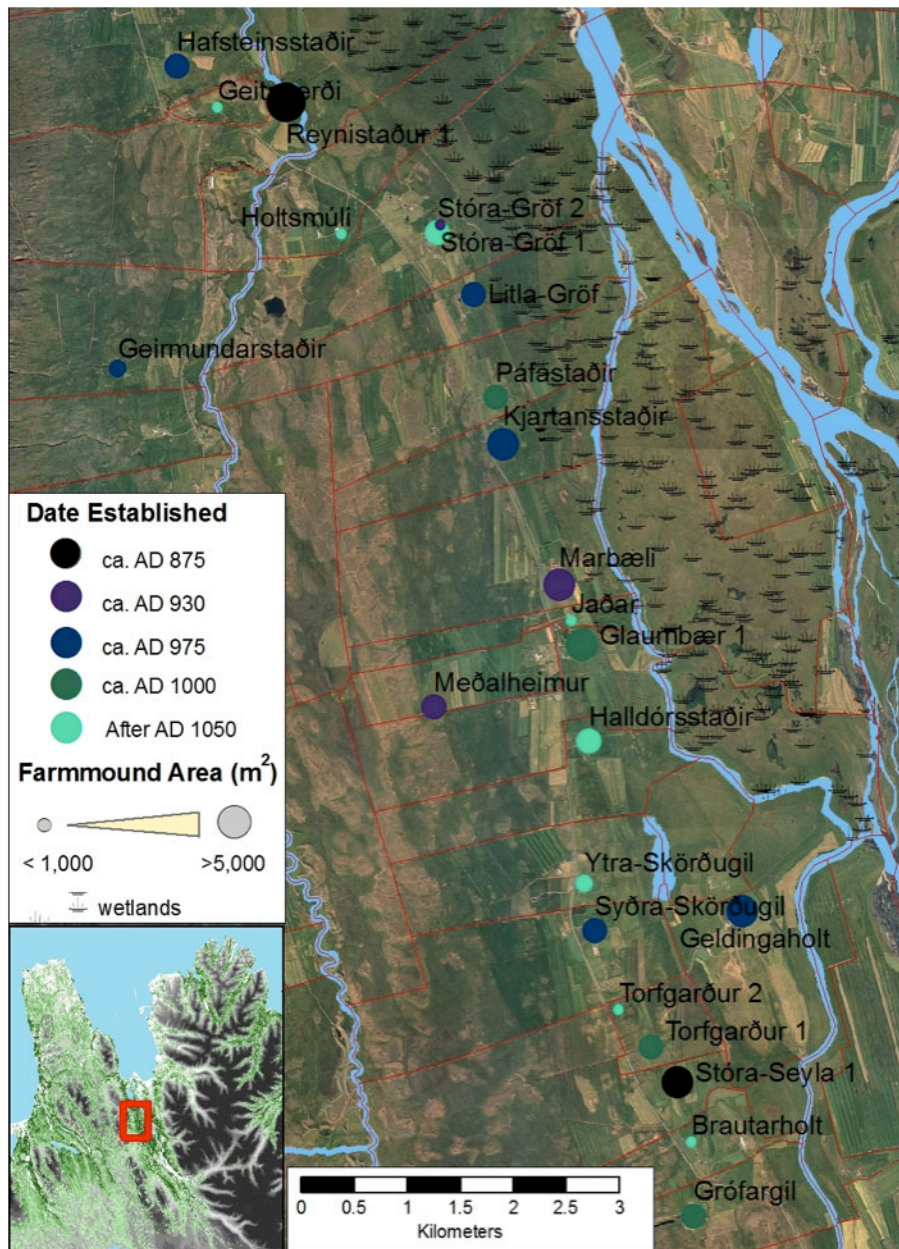


Figure 1. Map of the Skagafjörður Archaeological Settlement Region, showing farm mound size in 1100 AD and earliest establishment date.

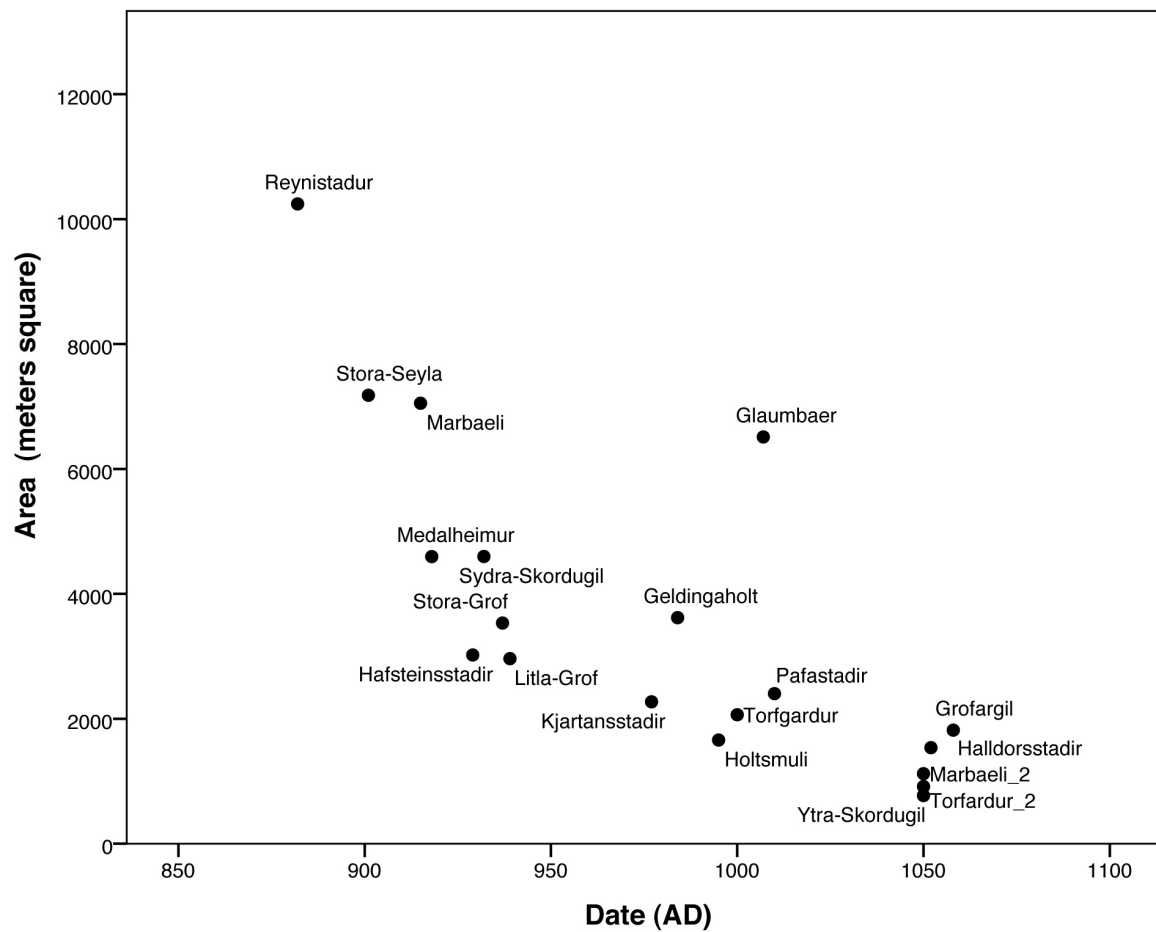


Figure 2 Area of farmsteads in 1100 against earliest establishment date (Person correlation is -.774).

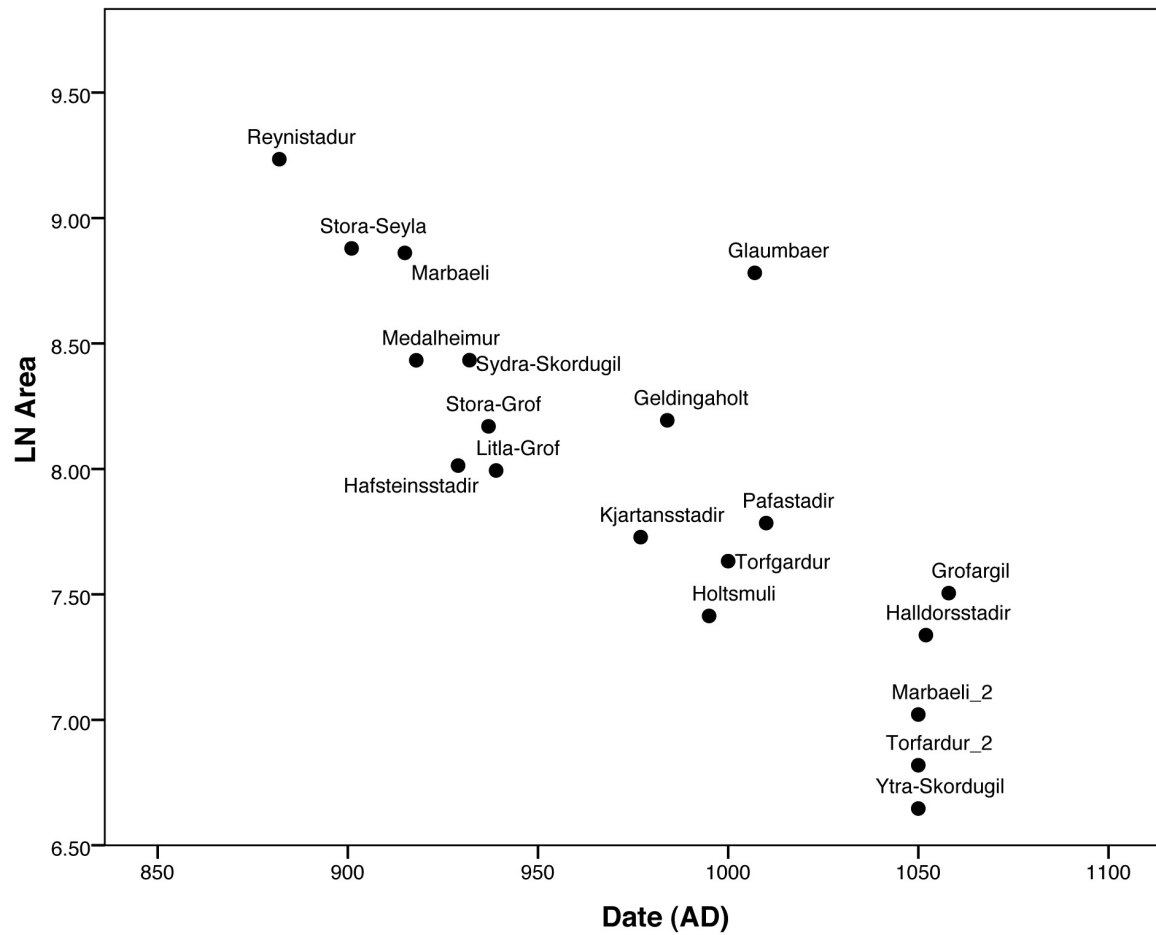


Figure 3. Natural log of the area of farmsteads against earliest establishment date (Person correlation is  $-0.839$  which is highly significant).



Figure 4. The white 1104 volcanic tephra (from Hekla) midway in the farm mound sequence at Kjartansstaðir.