## Viking Camps Case Studies and Comparisons

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## Chapter 16

# Viking camps, an economic interpretation

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## 16 Viking camps, an economic interpretation

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#### Introduction

In this chapter, the formal economic theoretical framework known as New Institutional Economics (NIE) is employed to analyse the phenomenon of Viking camps. NIE is by far the most commonly used theoretical framework in economic history when it comes to the study of more complex organisations. This framework implies that I assume individual agents to act rationally in its bounded sense and that there exists a set of rules (formal and informal) that are monitored and enforced by the community. The framework also makes it possible to derive collective rationality from individual rationality, i.e. to avoid the 'prisoner's dilemma' in a world of asymmetric information.<sup>1</sup> I also try to employ it on some empirical observations concerning Viking camps at a more macroeconomic level. I am aware that I may be raising more questions than I answer, but the purpose of the paper is to try to put a different light on the phenomenon of Viking camps that can complement existing analysis.

One noticeable trait of Viking studies, as well as in other studies of more ancient societies, is the (more or less outspoken) avoidance of more formal economic analysis. Based not least on Polanyi's works (Polanyi 1957; 1966; 1977) the notion has been that it is not meaningful to study more ancient societies using economic assumptions, concepts, or theories. The result is that economic activity and organisation in studies of more ancient societies is more or less always seen as a different artefact from what is the case for modern day economics, and that economic activities in the past cannot be analysed as economic as they were embedded in social relations. Yet questions asked about the organisation of more ancient societies are still often tied to economic observations in a way that opens up a space for more formal economic analysis. In the case of Viking camps, it is natural that such questions are analysed using economic assumptions of rationality and cost benefit. After all, few, if any, would assume that the camps were randomly placed or designed solely through principles of social embeddedness, or that the functions and organisation of the camps were the result of some totally socially embedded process not meant to serve any economic purpose at all, or that the

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timing of the existence of these camps would be totally random. On the contrary, as is shown by the research in this anthology, Viking camps were by no means void of purpose or strategy. Instead, they were multifaceted and sophisticated organisations that were clearly the result of rational decision making in certain contexts, an insight which paves the way for formal economic cost benefit analysis. But in order to employ such analysis, the context within which these rational decisions were taken must be understood – that is the point of New Institutional Economic Theory (NIE).

This chapter is organised as follows: first I make a theoretical outline, especially of NIE as more formal economic analysis, and discuss its strength in relation to more substantivist approaches based on the work of Polanyi since his work has been very influential within the fields of archaeology, ancient history, and anthropology. Thereafter I distil some main characteristics of the camps on the macrolevel and try to make sense of them using NIE.

#### Theory: economics and the Polanyi legacy

The influence of Polanyi's theories (Polanyi 1957; 1966; 1977) on the study of ancient societies, as for instance in Viking studies, is vast and has been at least since the 1990s. One example is the quote below which well formulates the two strands of formal vs substantivist approaches:

The analysis of the formalists is essentially based on contemporary economic models and is thus not built on the mutual relationship of exchange and social communication that is thought to have existed in many pre-monetary societies. Given therefore that the formalist approach strives to understand pre-modern economies by reference to contemporary phenomena, it seems inappropriate to attempt the application of this approach to a non-monetary system such as is featured in most Viking-Age societies. The substantivist analysis, on the other hand, is based on the tenet that economics, and particularly the exchange aspect of it as opposed to its trade or consumption elements, is part of a thoroughly holistic system in which the process of exchange is firmly embedded in social relations.

(Sheehan 2013: 810)

Sheehan summarises the reasonable observation lying behind the choice to employ the so-called 'substantivist' analysis – the fact that individual agents after all are most social beings acting in a social setting. And it is true that in extreme formal economic analysis this social embeddedness is non-existent. Still, the choice to apply such a substantivist approach also implies several strong assumptions. Assumptions that do not necessarily aid in the economic analysis of the phenomenon in question.

First of all, the substantivist approach assumes that there is a difference between people now in the present and historically in terms of economic and social thinking. Basically people are assumed to have been less economically rational in ancient societies than they are today. And the other way around, people today are obviously less socially embedded than what was the case for people in ancient history. We may not think about it in daily life but it is definitely reasonable to assume that our own economic transactions are socially embedded in one way or another. This does not necessarily mean that our actions are not economically motivated, but rather that there exists a social fabric that guides our behaviour. No market exists without certain rules of conduct, neither now nor in ancient times. Economic rationality and social embeddedness are not two opposing poles but rather complementary. It is part of economic rationality to understand this social fabric and thus to be socially embedded. So, instead of trying to look for differences between people now and then it may be important to look for similarities when it comes to basic driving forces such as costs and benefits, even if our contexts are vastly different.

Another problematic stand is the denial of profit motives for the individuals at the time – even if I am not certain that Hodges' claim about 'Most archaeologists and historians' is valid, the problematic issue of how to view economic incentives as profit is well highlighted in the following:

Few subscribe to David Hill's view, cited above, that profit was what mattered. Most archaeologists and historians now agree that in the imaginary world from which values and norms are derived, establishing what objects and possessions can and cannot be alienated is a crucial issue. As a result, defining balanced and imbalanced transactions (i.e. profit) in the entangled spheres of gift-giving cycles requires a nuanced perspective.

(Hodges 2012: 32)

The core of Hodges' argument here is that individuals in the past did not engage in transactions for any kind of gains. Individuals were simply not economically rational in any sense, not even in its bounded sense. The problem then is the timing of when this transformation of people into 'homo economicus' should have taken place. In other words, from which point in time should we assume that social embeddedness ended and profit seeking economic rationality began. Polanyi's answer to this was in relation to the industrial revolution, but very few (if any) economic historians would assume that agents long before the late eighteenth century were not economically rational, and also in very different places than in Britain at the time. It is also difficult with such an assumption to understand the sophisticated production and trade that was carried out in Asia and other places since long before the Viking age. In short, why would there be a silk road if no one was interested in economic gains?

Finally, it should be noted that Polanyi's empirical work on which he built his theories has been proven to be wrong by economic historians. To the contrary, empirical evidence underlines that basic economic axioms such as profit motives, supply and demand effect on prices, etc., also operated in the economies studied by Polanyi himself (Law 1992; North 1977; Silver 1983). Thus, it seems as if Polanyi's results concerning the non-existence of profit seeking agents in ancient cultures, what anthropologists at the time labelled 'primitive' societies, simply are not valid. People are and have always been profit seeking rational beings. It should also be added that, when using formal economic analysis, profit may well include such fields as social and political standing – the only unit in microeconomic theory is the individual's utility. Any decision that may increase the utility of the person in question can be analysed using the assumption of rational cost benefit calculations provided that we have an idea of the contextual setting at the time of the decision.

Given all this, an important question is why formal economic theory has failed as an analytical tool in archaeology and ancient history. Why has the focus on social embeddedness based on Polanyi and others proven to better suit these fields at the expense of economic theory? The answer is already given above: the lack of social context in microeconomic theory has proven difficult, if not impossible, to combine with the study of any organised society, including, economic historians would argue, our own present society. This shortcoming is obvious for any researcher in social science and is a fundamental problem in economic theory. But the importance of the social context has long since led economists to relax the very strong axioms concerning fully informed and isolated economic agents in microeconomics. Hence, to disregard economic theory based on the assumption that all economic theory assumes individuals to be fully informed, instrumentally rational, and isolated beings, is to throw out the baby with the bathwater. Much work in economic theory, not least in theories employed by economic historians, has dealt with these assumptions in ways which make it possible to combine formal economic theory with the social context.

The most important theoretical school in economic history is the so-called New Institutional Economic Theory (NIE). In recent studies NIE has productively been applied also to archaeological contexts (Ögren et al. 2022, and references cited within). Below, I summarise the most important points of NIE, before applying it to the study of Viking camps.

The most basic unit in NIE is the individual, the agent. It is the agent that makes decisions within a context. As in all economic theory the agent is striving to increase her/his utility – whether material or social (standing, influence, etc.). Unlike in traditional micro theory (the one usually referred to when denying the use of formal economic analysis) there are frictions in the economy such as that the agent is not fully informed and information is not free which means transactions are risky. There are also costs for searching and bargaining and to settle and uphold contracts between agents. The agent makes decisions based on her/his information, what is labelled 'bounded rationality', unlike in traditional microeconomic theory where agents are seen as instrumentally rational, i.e. where rationality is independent of the social context and all possess full information.

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Any group or collective of individuals is labelled an organisation. An organisation may be a nation, an enterprise, a fleet, a ship, a camp, or whatever would make agents combine their efforts. Such combined efforts – organisations – are governed by certain rules. The reason for this is that under the assumption of information asymmetries (not full information for at least one of the agents) what is beneficial for an individual agent is not always beneficial for the collective, the organisation. This is the basic outcome of the 'prisoner's dilemma', the most well-known game in game theory (c.f. Greif 2006).

Thus, finding a way to deal with lacking information and succeed with coordination of economic activities is key when it comes to economic efficiency. How to organise the agents within the organisation is what makes a difference in productivity in a world where agents possess similar technologies. In short, NIE can explain why some economies (countries) are rich while other are poor, despite the assumption of access to similar technology over the long run. The fabric of this organisation is what can somewhat loosely can be labelled 'social embeddedness'. In NIE this social embeddedness includes all the rules that we all live by, formal as well as informal. These rules are labelled institutions, hence NIE. The institutions and the enforcement mechanism, i.e. monitoring agents' conduct and punishment of wrong-doers, together make the institutional system.

So any agent will decide her/his actions relying on available information and what the costs and benefits of these different actions are given the institutional system. One of the important outcomes of this is that it is rational for collective organisations to monitor the behaviour of their own members in relation to other collective organisations also, something which helps to explain long-term and long-distance trading networks for instance. It also helps to shed light on possible organisational solutions.

In the following section I try to make some analytical contributions to the literature on camps, not least in this volume, based on NIE.

#### Viking camps and wintering: an economic interpretation

There are many observations concerning Viking camps that could and should be analysed also in a formal economic sense. However, this chapter does not have the space and time to address all these issues. Instead, I chose to focus on encampments at the macrolevel, i.e. trying to shed some light on the emergence, expansion, and ending of this phenomenon using NIE as a rational economic lens. There are some common points concerning the camps that well serve as starting points for such an analysis. Neil Price in his chapter in this volume lists a number of important common observations/features concerning these camps:

- by the 870s, the armies clearly numbered in the thousands of individuals
- the population of the camps included not only men, as had long been assumed, but clearly also women, and presumably children

- the majority of the army's members were of pan-Scandinavian origin, from all over the North, but a minority had other ethnic backgrounds
- the camps were not purely military installations, but also provided clear evidence of manufacturing, craftwork, and trade, implying extensive and not exclusively violent interaction with the populations of their hinterlands (at least one Torksey and perhaps others, seem to have left a longer-term legacy of settlement in or near the same location)

(Price this volume)

These observations raise some questions concerning the timing of the camps as well as their organisation and strategy.

#### The emergence and expansion of Viking camps

Concerning the timing of camps it is interesting to note that they existed during a quite well-defined period in time. The emergence of Viking camps seems to be too concentrated in time to be a mere one-shot coincidence. Downham (this volume) focuses on a study of later and rival Viking camps/ campaigns/settlements in Ireland from 914-947. This is, however, set in the context of Viking campaigns from the late eighth century and as stated by the author concerning Viking activities in Ireland: 'By the late 830s vikings were making concerted attempts to establish a series of settlements. These could serve as temporary bases for raiding and trading, for over-wintering or with the hope to establish a permanent presence in Ireland', adding that 'The most famous camp was Dublin, founded in 841. The era from its foundation until the expulsion of viking leaders from Dublin in 902 is sometimes called the "longphort phase" (Downham this volume). At a similar time, sources point to Vikings establishing camps at the mouth of the Loire river, with certainty in 843 and possible sooner (Deutsch-Dumolin this volume). García Losquiño (this volume) also analyses a prolonged stay by Vikings in and around the Guadalquivir river in present-day Spain in 844 – i.e. shortly after the Viking camps in Frankish territory. So Viking fleets operated, camped, and settled in Ireland, the British Isles, and the European continent in a way which seems to share common patterns not only in terms of the Scandinavian essence of these fleets but also in their modus operandi.

Why this phenomenon occurred could be because, as suggested by Deutsch-Dumolin, the Vikings in question were forced to stay over the winter, due to frozen rivers and their need to equip the ships and recruit men. Such an observation, however, raises several questions. First, if the fleet in question was forced to stay how could they have resisted enemy activities? To be able to stay in a hostile environment for a longer period of time and even an entire winter implies strong defences and supply chains. One reason could of course be because the environment was not particularly hostile, perhaps due to a lack of local forces able to resist the Viking presence. If there was any kind of military presence around the Vikings' encampments it implies that some kind of organisational agreement with the locals must have been in place, as pointed out, for instance, by Deutsch-Dumolin (this volume) in the case of Vikings setting up camp at the Saint-Maur des Fossés monastery in 862 with the possible agreement of the Carolingian authorities. Viking leaders could use this opportunity to gain resources for further activities including to recruit personnel, as the example of Rollo mentioned by Deutsch-Dumolin shows.

I do not present a solution to the emergence of this phenomenon of Viking camps and/or wintering but the fact that it begins around a certain point in time indicates that the Vikings at this time had enough organisational force to be able to stay over longer periods and even winters. It implies that from this point in time the Vikings had acquired sufficient military capability, organisation, strategy, local support, and supply chains of enough strength to at least have a reasonable chance of staying for longer periods and not being ousted by enemies. The Vikings at this point had reached an adequately strong and efficient organisation that they were able to match or even outweigh the power that was present at the time of their arrival. In the case of the Guadalquivir river in present-day Spain in 844, the Vikings controlled the river and an important part of the land surrounding it for more than a month and it took a combined and coordinated military effort by the local sovereigns to be able to force the Viking fleet to leave (García Losquiño this volume). For the Viking camps to be realisable and to expand, some basic parameters must have been in place: first in terms of numeraire and technology, second in terms of strategy, third in terms of organisation, and fourth in terms of external circumstances, most notably the force of the present local power but also the geography and possible infrastructure for transportation via seaways and routes overland.

There seems to be a kind of logic to the pattern of wintering that may be explicable in terms of diminishing marginal utility of the phenomenon. Deutsch-Dumolin (this volume) writes, regarding the case of the Frankish territories, that after 843 wintering increases in scale and in scope (cf. Cooijmans 2020), that from 855 it is also moving along inland waterways creating tension with local inhabitants, and that after 866 in the heart of the territories regular wintering and attempts to settle permanently are taking place. The fact that the phenomenon started on a smaller scale and increased in frequency as well as in scale suggests that the balance between cost and benefits for the Vikings and the locals changed with time. At first, wintering and building encampments probably could be done with fewer resources. Still, the Viking camps were situated closer to the coast, meaning that the Vikings needed fewer resources for supply chains and defence than when they penetrated inland along rivers to set up camps. Resistance may also have been weaker at the early stage as responses to the Vikings' hostilities may have been less coordinated. The cost for the locals in the areas where the Vikings settled in trying to oust them may have been much higher than the benefit of peaceful trade, especially under the imminent threat of violent responses from the Vikings. On the other hand, if the Vikings wanted to be able to stay an entire winter they would have needed to amass sufficient force to keep supply lines open and been careful not to exploit the local inhabitants to the point that their chances of survival were endangered by violent responses from the locals. Clearly, more strength and organisational skill in keeping supply lines open and enemies at bay would have been needed to establish a long-term camp site inland than a camp closer to the sea, as exemplified in the camp at Dublin (Downham this volume), the mouth of the Loire river in 843 (Deutsch-Dumolin this volume), and those around the Guadalquivir river in present-day Spain in 844 when the Vikings after more than a month's stay eventually were hunted away by a coordinated response from the local forces (García Losquiño this volume).

Despite increasing costs for the project of longer-term camps and wintering it must have been economically viable as it continued, increased in scale and scope, and eventually also resulted in settlements. The Viking Great Army that was active in the 870s in England counted thousands of individuals of different origins specialising in different crafts (Biddle this volume; Biddle & Kjølbye-Biddle 2001; Hadley & Richards 2016; 2018; 2021; this volume; Jarman 2019; Jarman et al. 2018; Kershaw et al. this volume; McLeod 2014; Williams 2020). This fleet also carried horses for travelling inland (McLeod this volume). Any such venture requires not only military strength but also sophisticated organisation.

#### Organisation

We can see the Viking camps as a kind of mobile jurisdiction (cf. Ögren et al. 2022) within which the institutional framework, i.e. the rules of conduct and the enforcement mechanism, was in the hands of the Viking fleet and distinct from the territory outside of the camp. A possible comparison would be the Hanseatic League that also implemented its own jurisdictions, not infrequently by force, in different places where it was active.

As the camps developed in size and became 'more international with a Scandinavian essence' (Price this volume), individuals were recruited from different parts outside of Scandinavia to be part of Viking fleets. As stated by Price (this volume) this first means that there were people interested in joining the Viking fleets for one reason or another. It can of course be assumed, given the Vikings' activities, that many recruits were forced labour or slaves, but again, it is costly to capture and hold slaves and it is not likely that they would have been very motivated to aid the Vikings' campaign. It is unlikely that an important part of the military force consisted of such slaves, as the threat of rebellion would have been too great if these were armed. It is especially unlikely that any local recruits would have been enslaved, as this would have led to increased local hostilities towards the Vikings in the camp. A guess would be that at least a major part of the non-Scandinavians volunteered, which raises the question of why they wanted to join. Here we can simply assume that there was a pay-off for these individuals to join in one way

or another compared to the alternative. Joining a fleet may have been a career choice and, as fleets seem to have been quite flexible entities, it is also possible that there were opportunities to join competing fleets. This seems to have been the case with the competing Viking fleets in Ireland (cf. Downham this volume). If individuals, Scandinavians and non-Scandinavians alike, had choices to join one or several fleets it also means that there had to be a certain balance between the managers (chieftains) of these fleets and their members. Even if the power balance was certainly asymmetrical the need for added resources would put a constraint on the leaders' power to abuse members of the fleets/encampments.

The follow-up question is why these fleets would be interested in taking in new recruits. Of course an added arm to the force can be seen as an advantage for the fleet, but there is quite a lot of potential cost/risk in opening up a community to any random individual. Hence we can assume that some kind of, even if rudimentary, test of the skills of the recruits in question was made. These camps/fleets may have been based on some kind of meritocratic idea that saw the use of bringing in people with different established skills. Bringing in such individuals for the camps/fleets had the benefit of extending the knowledge of the network: knowing different crafts, local knowledge, etc., all resources that served the common good of the camp/fleet. Such knowledges/skills are not delimited only to military force and, as any military campaign is also at heart dependent on logistics/allocation, production, specialisation, etc., it is not at all surprising that these camps/fleets were not exclusively male affairs; in fact it would be more surprising if they had been.

Another question is how to organise and keep order in such a multicultural group as a fleet consisting of thousands of individuals, some or many of them with different origins. The fact is that this is not very different from any society. Culturally homogenic societies may seem some kind of a norm but in history they are an anomaly. But there are often dominant cultural traits such as in the Roman empire or similar. In this case the core was Scandinavian, that means that rules probably were set by the Scandinavians. The way to transfer rules in most societies was through religion. Abrams' argument in this volume 'starts with the premise that the armies did have a religious life, maintained while they were on the move'. This was probably the case. Anyone in the camp/fleet would have to accept the rules imposed by the prevailing religion and the way it was interpreted by those in charge. That these beliefs and practices were religious does not oppose the idea that they actually involved important codes of conduct for how to behave and what to expect in behaviour from other individuals within the camp/fleet.<sup>2</sup>

But many times the most efficient organisations and strategies are built from below, that is, by the individuals and groups that themselves have an interest in the ventures at hand. One of the common strategies that seems to have endured over time was to divide into several smaller fleets (or  $li\partial$ ) while keeping a central camp. This seems to have been the *modus operandi* at least from the 840s on the continent or more precisely the Frankish realm and Spain (Deutsch-Dumolin this volume: García Losquiño this volume) and was also practised by the Great Viking Army in England (cf. Kershaw et al. this volume). This shows a flexibility that must have been difficult for the locals and regional powers to answer to. It is also an efficient way of diversifying the activities of the camps/fleets. To make such an arrangement where several smaller units break free from a central unit for more local campaigns and then regroup with the central unit requires that a lot of trust in the arrangements must be present: trust that smaller units will return with eventual loot. trust that the central unit will provide the security and necessities of returning units, trust that the smaller units will return to defend the central unit if under attack, etc. One of the central assumptions in economics in general is that if individual agents follow their own rationality, this will, by the law of unintended consequences, lead to certain organisational outcomes of economic efficiency that are not the result of hierarchical decisions nor authoritarian control, but are still the most efficient outcomes (Smith 1776 [1976]). This force, building on individual rationality from below, should not be underestimated and may well have been at play in the case of the Viking camps/ fleets.

#### **Concluding discussion**

The point of departure for this chapter is to underline that by using formal economic theory assuming bounded rationality we could better understand the phenomenon of Viking camps. Questions such as why the camps were placed where they were, how the Vikings may have secured supply lines, how they moved, interacted with the local inhabitants, the strategies they employed, how they were organised, etc., may be analysed using this approach.

#### Acknowledgement

As I am not an archaeologist or ancient historian I would first and foremost like to express my gratitude to all the researchers in this anthology and in the field in general for making their impressive knowledge and insights available to me.

#### Notes

1 The prisoner's dilemma is a strategy game showing that under the assumption of no or asymmetric information the most rational response for the individual agent will lead to a stable but suboptimal outcome for both agents. In this scenario two prisoners who cannot communicate are given the option to stay silent or betray the other. The best outcome for both prisoners is if they betray the other. If prisoner A betrays and prisoner B stays silent, prisoner A is freed. But prisoner B is given the longest prison sentence. And vice versa. This means that for both prisoners the most rational choice, given the lack of information, is to betray. But when both betray the other one this is a suboptimal outcome for both, as they would have had a better outcome if they both had stayed silent. This is a basic game showing that suboptimal solutions often can be the case when individuals are following rational decision making when lacking information.

2 Abrams (this volume) makes a distinction between Christianity and Viking paganism based, on the one hand, on what one does (rites, passages, etc.) and, on the other, what one believes. This is to me an artificial divide as Christianity as well is full of such rites. Paganism and Christianity are the same in that sense. Historically, and even today, religions such as Christianity can be seen as part of the institutional system (with rules and enforcement) just as Norse paganism can.

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