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KOMMISSIONEN FOR VIDENSKABELIGE UNDERSØGELSER I GRØNLAND

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# A CRITICAL ACCOUNT OF THE WRITTEN AND ARCHAEOLOGICAL SOURCES' EVIDENCE CONCERNING THE NORSE SETTLEMENTS IN GREENLAND

BY

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WITH 25 FIGURES IN THE TEXT, 2 SURVEYS AND 2 MAPS

KØBENHAVN C. A. REITZELS FORLAG

bianco lunos bogtrykkeri a/s 1972

For

My Wife

and

My Parents

"Enn annarr lutr er forvitni tvi at þat er oc mannzens natura at forvitna oc sia þa luti er hanum ero sagðer oc vita hvart sva er sæm hanum sagt eða æige."

> Konungs Skuggsjá: Um kaupmenn. (In the chapter on Greenland)

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# PREFACE

This paper is based on a special presentation in the field of history. In this connection I want to thank two of my teachers at the University of Copenhagen, Professor, dr. phil. Aksel E. Christensen, and Lektor, fil. dr. Ólafia Einarsdóttir, for good and inspiring instruction. I am particularly grateful to Aksel E. Christensen for considering my paper worth the reward of "Stiftamtmand Regenburgs legat til fremme af nordisk historie". (Scholarship granted for the encouragement of studies in the field of Scandinavian history).

I first became interested in Norse Greenland in 1962, when I took part in the National Museum's excavations at Brattahlid (Qagssiarssuk) and of the Norse farm at Narssaq. These investigations were headed by Knud J. Krogh, Jørgen Meldgaard, and C. L. Vebæk.

C. L. Vebek gave me a great deal of support while I was at work on this paper, for his never-failing helpfulness and patience enabled me to include unpublished materials on the excavations, and he also kindly allowed me to use maps and drawings from preliminary accounts.

I have discussed specific problems with the following scholars: Kristjan Eldjárn, then the Director of the National Museum in Reykjavik, Lektor Finn Gad, Jørgen Meldgaard, and my good friend and traveling companion, Michael Wolfe.

I am greatly indebted to Dr. phil. OLAF OLSEN for reading my manuscript critically, and for giving me good advice during its preparation.

Dr. phil. Aage Roussell most kindly placed the majority of the illustrations at my disposal. K. Krogh loaned me the drawing of "Tjodhilde's church", and C. L. Vebæk made the above-mentioned contributions.

Finally, I want to express my warm thanks to the editors of *Meddelelser om Grønland*, Dr. Helge Larsen, Colonel J. V. Helk and Mrs. Else Helk, and to the translator, Mrs. Karin Fennow. All of these persons have been extremely helpful and cooperative in connection with its publication.

Most of all, I want to thank my wife, Lotte Jansen, for her invaluable help in every respect, both when I was studying, and when I wrote the special presentation, as well as later on, during work on the now published paper.

Henrik M. Jansen

#### Abbreviations

EsR = Eiriks saga Rauða.

Fltb = Flateyjarbók.

GH = Gesta Hammaburgensis Ecclesiae Pontificum (Adam of Bremen).

GHM = Grönlands Historiske Mindesmærker I–III, udgivne af Det kongelige

Nordiske Oldskrift-Selskab. Kjøbenhavn 1838–45.

 $Gs \hspace{1cm} = \textit{Groenlendinga saga}.$ 

H = Hauksbók.

 $HN = Historia\ Norvegiae.$ 

 $HT = Historisk \ Tidsskrift, \ København.$ 

I.B. = Ívar Barðarson: Det gamle Grønlands Beskrivelse, udgivet af F. Jons-

son, København 1930.

Islb = Ari Frodi: Islendingabók.

 $Isls = Islending as\"{o}gur.$ 

KLNM = Kulturhistorisk leksikon for nordisk middelalder. I-, København 1956-.

 ${\rm Ldn} \qquad = {\it Landn\'amab\'ok}.$ 

 ${
m M} = {\it Melab\'ok}.$ 

M 1 et seq. = Ruin groups in the Middle Settlement.

MoG = Meddelelser om Grønland.

Nat. Arbejdsm. = Nationalmuseets Arbejdsmark, København.

NHT = (Norwegian) Historisk Tidsskrift, Oslo.

NK = Nordisk Kultur, Stockholm - Oslo - København.

S = Sturlubók.Sk = Skarðsarbók.

V 1 et seq. = Ruin groups in the Western Settlement.

b = Porðarbók.

Ø 1 et seq. = Ruin groups in the Eastern Settlement.

ÅNOH = Årbøger for Nordisk Oldkyndighed og Historie.

# CONTENTS

Introduc	ction	7
Chapter	I: Two Papal Bulls from 1053 and 1055	12
_	II: Adam of Bremen: Gesta Hammaburgensis ecclesiae pontificum.	15
-	III: Ari þorgilsson: Íslendingabók	$^{26}$
_	IV: Historia Norvegiae	32
_	V: Íslendingasögur	41
_	VI: Eiriks saga Rauða and Groenlendinga saga	49
_	VII: The Topography of Norse Greenland	68
_	VIII: The Norse Settlements	74
-	IX: Development of the Dwelling Types	80
_	X: Pagan Relics	100
_	XI: The Churches	102
_	XII: Comments on the Finds and the Zoological Materials	122
Conclusi	on of the Entire Investigation	125
Appendi	x to Íslendingabók	128
Appendi		134
		135
Summary		139
		145
		151
	f Place Names	156

# INTRODUCTION

The colonization of Greenland is the final phase of a development that began before the Viking Age with the Norse settlements on the Orkneys and Hjaltland (the Shetland Islands).

Navigation of the Atlantic islands accordingly commences prior to 800 A.D. In the Viking Age the expansion moves southwest towards Northern England, Scotland, Suŏereyjar (the Hebrides), the Isle of Man, and Ireland; northwards towards Finnmarken, Bjarmeland, and Svalbard; westwards towards the Faeroe Islands and Iceland, and as a part of this wave of emigration the voyages to Greenland and the settlements there, as well as the subsequent voyages from Greenland to Vinland must also be taken into consideration. This signified the natural end of the Norse expansion.

The theory about Harald Hårfager's conquests and a flight from his "ofriki" is now almost abandoned. The colonization of Greenland should not be explained on a political basis, but should rather be attributed to economic conditions, and the settlements in Greenland become a direct continuation of those in Iceland.

The emigration can obviously be placed in relation to over-population and a lack of new land for cultivation. At the same time, however, it should be emphasized that the colonization on the Faeroe Islands, Iceland, and Greenland took place in completely undeveloped lands; thus from the very beginning the settlers took over the new areas and transferred to them Norse farming method and artifacts, legal principles, and social attitudes.

Wherever the immigrant settled, he tried to adapt his own surroundings and ways of life as far as possible to those familiar from home; he re-created his own milieu to the extent that conditions permitted this. It is only later that changes take place under the influence of the new and frequently entirely different environment.

Our knowledge of the Norse settlements in Greenland is based in part on written sources, and in part on topographical and archaeological materials.

The number of written sources is quite comprehensive, but in many cases these sources are insufficient. They consist of historical accounts,

Icelandic sagas, topographical sources such as, for example, "Landnámabók" and others, as well as Icelandic and Norse documents; but the latter shed only dim light on conditions in medieval Grenland, and are almost left out of this paper. This also concerns the Icelandic annals.

Finally, I have deliberately refrained from including "Konungs Skuggsjá", for I do not believe that it would be proper to make use of its contents, as subsequent to E. Vandvik's¹ preliminary studies it evidently contains many uncertain factors with respect to the number of authors as well as the dates when the various chapters were written. Not until these matters are clarified will it be correct to use "Konungs Skuggsjá"s chapter on Greenland.

Studies of the Norse history of Greenland can be said to start with Arngrimur Jónsson's "Groenlandia" (ca. 1600), Björn Jónsson á Skarðsas's "Grænlands Annaler", which is somewhat earlier (see below), as well as Tormod Torfæus's "Historia Vinlandia antiquæ" (1705) and his "Gronlandia antiqua" (1706). The dedications in the two latter works contain an urgent plea for the resumation of the voyages to Greenland.

This appeal apparently bore fruit, for the Great Northern War had scarcely ended when Hans Egede came to Greenland in 1721, and was the first to recognize that the relics of dwellings and other things that were found in West Greenland were Norse ruins. To be sure, Hans Egede thought that it was a question of "Vestribyggd" (the Western Settlement), and that "Eystribyggd" (the Eastern Settlement) was situated on the east coast of Greenland. There were supporters of this interpretation as late as towards the close of the 19th century, but as early as 1792 H. P. Eggers, who did not himself visit Greenland, established the correct location of the respective settlements.

I shall not go into further detail here concerning research on the history of Norse Greenland in the 18th and 19th centuries,<sup>2</sup> for not until 1880, when G. Holm went to the Julianehåb District, and in 1894 and

<sup>&</sup>lt;sup>1</sup> See "Gåter i Kongespejlet" in "Syn og Segn", Vol. 58,1952, pp. 1–8, and "A New Approach to the Konungs Skuggjå in Symbolae Osloensis" Vol. XXIX1952. Vandvik completely discounted earlier theories about dates and authors, but pointed out that in a work that is so uneven in its style and deals with so many extremely different matters, it could make sense to search for additional authors. Vandvik's plan for further research was the following: From the very beginning "Konungs Skuggsjå" was written by one man, yet was interpolated. Or: The three main dialogues about the merchant, the courtier, and the king have different origins, and were collected in one book by a single editor. Or: The final alternative does not exclude the possibility of the text of each of the dialogues having been interpolated or altered.

<sup>&</sup>lt;sup>2</sup> In regard to the 18th and 19th centuries one can refer to the brief survey in D. Bruun: "Erik den Røde". 2nd Ed. 1931, p. 104 ff. Furthermore a more detailed explanation of previous research appears in GHM, Vol. I–III, published by Det Kgl. Nordiske Oldskriftselskab, Kjøbenhavn 1838–45.

1903, when D. Bruun's investigations took place there and in the Godthåb District, respectively, did systematic archaeological explorations of the Norse settlements commence.

From 1921 to 1931 P. Nørlund carried out the excavations at Herjolfsnes, Gardar, and Brattahlid; thereupon, and until 1939, Aa. Roussell excavated Hvalsey farm, the so-called Sandnes farm, and some other farms in Austmannadalen in the Western Settlement. Following World War II and up to 1962 C. L. Vebæk was responsible for investigations in the Eastern Settlement first and foremost of the convent and farms in medieval Vatnahverfi. K. Krogh has been in charge of the work since 1962; his most important excavation to date has been that of "Tjodhilde's church" on Brattahlid.

It is most regrettable to note that none of the excavations that have taken place since 1945 has been published as scholarly papers; yet K. Krogh's preliminary account in his book that came out in 1967 is excellent. A considerable part of my information therefore is based on verbal accounts given by the archaeologists involved. When possible, reference is made to more popular and/or preliminary reports. In this connection it should also be pointed out that since Aa. Roussell's doctoral thesis appeared in 1941, no complete survey of the archaeological materials has come out. I have endeavored, to some extent, to make up for this by bringing this survey up-to-date as of the summer of 1967; as was true in 1941, however, this also is confined to the ruin complexes proper — and the many unpublished finds are not taken into consideration.

As a result of the excavations at Brattahlid in the period 1962–1965, the small amount of anthropological material relative to the earliest period grew considerably, but since J. Balslev-Jørgensen has not yet completed his analyses, I have thought it advisable to omit this area in my investigations. It is briefly mentioned, however, in the surveys given elsewhere in this paper.

A trait common to all previous publications is that in many cases the archaeologist has tried to confirm the information given in the written sources on the basis of archaeological evidence, and this is still done without consideration of the methodological principles upon which a historian bases his critical studies of the source materials. The philologists have failed to give support in this connection, for to a greater extent than any others they have attempted to confirm the credibility of even the most questionable parts of the sagas and have uncritically accepted the archaeologists' interpretations; consequently, the current situation can be described as rather discouraging. In comparison to the excavations carried out in Denmark long since, modern methods of excavation were introduced in Greenland only recently. Let us hope that we have arrived

at the start of a wholly different critical treatment of the written sources; this paper is a modest effort in this direction.

The place names given in the topographical sources are used here out of simple necessity; the sole reason is that by referring to earlier usage the text will be easier to read. A further explanation of the use of Norse place names appears below.

I have not attempted to give a comprehensive chronological account of the Norse settlement in Greenland in the Middle Ages,<sup>3</sup> for, as will be seen below, currently available material does not make this possible.

The major part of the source materials employed in this paper is not typical of those with which a historian normally works, for, as was mentioned above, sagas and archaeological evidence also are used along with current historical materials. The paper furthermore gives a detailed explanation of the problems involving the sagas. In regard to archaeology, I should like to confine myself to remarking that as this field has gradually gained respect, it is also a historical discipline that simply employs a different type of source.

To avoid making this paper too weighty with excerpts of earlier publications on excavations in Greenland, I have limited myself to a considerable extent by simply referring to them; this also applies to illustrations and drawings.

Herewith I have touched upon the framework of my paper, and to facilitate reading it, a brief explanation follows: the title should be widely interpreted, all aspects of the information that the written sources give are treated. Needless to say, it is impossible to analyse all the sources in this category that concern Greenland. Those materials I have dealt with in the following should be considered typical and representative of the group to which they belong.

Since Greenlandic matters often occupy a comparatively small part of these source materials, I have thought it most proper to present each of them in a larger context; but since this introduction should not have too dominant a position in my paper, less important matters are given further mention in the appendices.

<sup>3</sup> Attempts of this kind were made, e.g., by P.Nørlund in 1967. No doubt he was aware of the unreliability of the sagas, but his criticism of them was not particularly drastic. Moreover, the medieval society he described should be considered static. Many of his conclusions are currently out-dated.

Most-recently F. Gad (1967) endeavored to describe the Norse settlement in Greenland. In contrast to Nørlund he makes a conscious effort to prove that there was a constant development in the course of the settlement's 500 years of its existence, but his description is unsuccessfull, first and foremost because of an inadequate insight into the problems of the Norse sources – with respect to the evidence of the sagas or to the archaeological testimony, which usually are emphasized to a greater extent than is justifiable.

To facilitate understanding of the archaeological materials, the appendices are supplemented by two large surveys of the ruin groups, namely, the farm complexes and the churches, the monastery and the convent, respectively.

The terminology employed for the inhabitants of medieval Greenland is Norsemen/Greenlanders = Scandinavians, and Eskimos in regard to the Polar peoples who immigrated from the North.

The manuscript was completed in the summer of 1968. After this date several excellent and thought-provoking articles on this subject have appeared; these do not, however, have a disturbing effect on my conclusion—in reality, the opposite is the case. (See Rosenkrantz, 1967, 1967b; Fredskild, 1969; Bak, 1969; Skovgaard-Petersen, 1969; Wolfe, 1968).

# CHAPTER I

# The First Mention of Greenland: Two Papal Bulls from 1053 and 1055

The earliest dated source in which the name Greenland appears<sup>4</sup> is the Papal Bull of 6 January 1053 from Leo IX to Adalbert, Archbishop of Hamburg-Bremen.<sup>5</sup> In the Bull, in accordance with the privileges of NICOLAUS I, AGAPITUS II, and BENEDICTUS VIII (or IX) (Curschmann 1909, p. 46 and 61 et seq.), the Pope ratifies that the Archbishopric of Hamburg-Bremen, with everything under its jurisdiction, including suzerainty over the bishops in omnibus gentibus Sueonum seu Danorum, Noruuechorum, Islant, Scrideuinnum, Gronlant et universarum septentrionalum nacionum . . . Hamburg-Bremen shall constitute one diocese. Adal-BERT is appointed legate of the apostolic see, and the Pope's representative to the people of the North; the Pope reserves for him and his successors the ordination of bishops, and other privileges. Apparently it was taken for granted that there was a bishop for the people of Greenland. This question will be discussed further, below; at this point it shall merely be mentioned that there is no evidence of a special bishop of Greenland having existed in 1053, nor do we know of plans that one was inducted there.

The Bull was cited at an early date by Adam of Bremen in GH6:

- <sup>4</sup> I feel that it is unneccessary in this paper to go into "Hamburg falsifications", in which, for example, Greenland and Iceland are mentioned in "the deed of foundation" to Hamburg-Bremen anno 832. I fully agree with F. Curchmann's results (1909). Curschmann analyzed these papal bulls from the point of view of pure diplomatics and concluded that there was a question of obvious falsification, but did not touch upon its motive.
  - <sup>5</sup> "Diplomatarium Danicum" (D.D.) Series 1, II, no. 1.
- <sup>6</sup> B. Schmeidler, ed.: "Magistri Adam Bremensis Gesta Hammaburgensis ecclesiae pontificum". Hann. & Leipzig 1917: Book 3 chap. 78 p. 226. This entry in GH is only extant in the B and C variants. See Schmeidler, p. 219, note α to chap. 72 more on this subject below.

Translation from the Latin: ... By the Pope, indeed, he was rewarded with the stately privilege of having the apostolic lord confer his own plenary rights upon him and his successors, to such an extent that he might, frequently against the will of the kings, establish bishoprics throughout the whole North in places that seemed suitable ...

A papa vero meruit hoc dignitalis privilegium, ut totum ius suum dominus apostolicus in illum transfunderet successoresque eius adeo ut ipse per totum aquilonem in quibus locus oportunumvidebatur....

Apparently one reason why Greenland was included in the long list in the Bull of 1053 was Adalbert's political ambition in the Church. He wanted to have his diocese changed into a patriarchy patterned upon the primitive church. According to the attitudes prevalent in the Church at that time, an archbishop who had from 10 to 12 suffragent bishops under his jurisdiction, plus a recently-Christened flock in a place where the large number of bishops and the remoteness from Rome made it difficult to present ecclesiastical matters to the Pope, could be given the status of patriarch; in such case the newly-converted people's archbishop would have to present such matters to the patriarch for his decision, and he would be invested with a kind of papal authority. It was this almost papal authority that Adalbert wanted to have over the North; he believed that it would be easy to obtain the 12 suffragen bishops from the Hamburg-Bremen archbishopric. Furthermore, he also needed a Danish ecclesiastical province headed by an archbishop.

It is against this background that Greenland should be viewed as one of the lands listed in the Papal Bull. And possibly there may have been plans afoot to appoint one of the suffragen bishops to the diocese of Greenland. All of this entered into Adalbert's political campaign. Greenland thus was one of the pawns in a game involving many Nordic pawns.

The above-mentioned privileges were again ratified on 29 October 1055 by Pope Victor II.8 Adalbert was given suzerainty over episcopos in omnibus gentibus sueonum seu danorum, norwegorum, island, scrideuinnum, gronlandon, et universarum septentrionalium nacionum etc.

But Greenland is left out of the subsequent series of papal bulls. Adalbert's political activities collapsed, and were not taken over by Liemar, his successor; it is quite questionable that upon his accession Liemar received from Pope Alexander II a document comparable to the one that was mentioned above (Curschmann, 1909, p. 51 et seq. and p. 72 et seq.).

We have no idea how news about the remote island in the North reached the archbishopric. Nor is Adam of Bremen able to provide detailed information concerning Greenland ca. 20 years after the first Papal Bull. (See below).

<sup>&</sup>lt;sup>7</sup> See, e.g., E. Arup, 1925, p. 166 et seq.; Hal Koch, 1963, p. 43 et seq., and B. Schmeidler, 1918, p. 184 and p. 249 et seq.

<sup>&</sup>lt;sup>8</sup> D.D. I series II no. 2 and Curschmann p. 51 and 62 et seq. The source of the diploma is the Bull of 1053. When the diploma was drawn up the Pope and Emperor Henrik III were in Northern Italy; Adalbert was in the Emperor's retinue.

Nevertheless it is possible to trace why about 65 years after its discovery the island is included in Adalbert's plans for the North.

As mentioned above, the sources are GH,<sup>9</sup> and the far earlier and somewhat less credible "Isleifs þattr biskups" in "Hungrvaka" from about 1220.

But to begin with, GH:... Itaque petentibus illis ordinavit quendam sanctissimum virum nomine Isleph. Qui ab eadam regionem missus ad pontificem aliquandiu retentus est apud eum cum ingenti prorsus honore, discens interea, quibus noviter conversos ad Christum populos salubriter posset informare. Per quem transmisit achiepiscopus suos apices populo Islanorum et Gronlandorum, venerabiliter salutans eorum ecclesias etc.... In contrast to many other sagas "Hungrvaka" is quite significant from an historical point of view, in particular with respect to the younger bishops, for the author, who must have had a connection with Skálholt, had access to special sources, including documents not known from other surviving sources.

Concerning Isleif, it is said that his father, the Chieftain Gizurr Hviti from Skálholt, one of the men who made Iceland's Alting accept Christianity, went abroad with Isleif and sent him to be educated by an abbess in a castle called Herfurda. Beyond any doubt this is identical with Herford in Westphalia under the bishopric of Paderborn which, in turn, was under the jurisdiction of Hamburg-Bremen (Fr. Paasche, 1915, pp. 226–27).

Accounts of the northern islands were forwarded from Herford to Bremen. Later on, upon being ordained as a priest, Isleif returned to Iceland, where he remained for a few years until his people elected him Iceland's first bishop and sent him to Germany for his ordination. In my opinion there is every probability that Isleif's various stays here helped to spread knowledge about Iceland and Greenland throughout the diocese, and that it is more likely that ADAM obtained his information via Isleif's connections than through Sven Estridsen, as he says himself, and as, for example, F. Nansen, and along with him, many others have maintained. (F. Nansen, 1911, p. 199 et seq.).

### <sup>9</sup> Schmeidler, 1917, p. 273.

Translation from the Latin, Book 4 chap. 36:... On their petition the Archbishop therefore consecrated a certain most holy man named Isleif. And when he was sent from that region to the prelate, the latter kept him in his company for a while and furthermore bestowed great honor upon him. Meanwhile Isleif learned in what respect people newly-converted to Christ can be instructed salutarily. The Archbishop transmitted letters via Isleif to the people of Iceland and Greenland, reverently greeting their churches, etc....

- <sup>10</sup> In "Byskupa sögur" 1938 pp. 13–25.
- <sup>11</sup> On this occasion he also visited Henrik II and gave him a polar bear(!). In Rome he met the Pope, and on his homeward journey Adalbert ordained him on Whitsunday, 4 June 1055 –, as Adam also writes.

# CHAPTER II

# Adam of Bremen:

# Gesta Hammaburgensis Ecclesiae Pontificum

Very little is known about Adam's personality. (KLNM Vol. 5, col. 283). In 1066 or 1067 he came as a canon to the cathedral in Bremen, where he served as a teacher at the cathedral shool. Presumably he visited Denmark in 1068 – perhaps several times, but we neither know when he arrived nor how long he stayed here.

GH consists of four books, the last of which is an ethnological and geographical description of Scandinavia: "Descriptio Insularum Aquilonis"; the work also contains a prologue and an epilogue. In the prologue Adam dedicates his historical work to Archbishop Liemar (1072–1101). He wanted, among other things, that this "humble" work would contribute to the reinstatement of the Hamburg-Bremen to the archbishoprical position it formerly had.

Since at that time the entire North was under the jurisdiction of Hamburg-Bremen, its history and description necessarily should be given importance.

As far as studies of Norse Greenland are concerned, only Books 3 and 4 are interesting; before these are discussed, however, the merits of the work should be touched upon.

Up to the middle of the 10th Century the accounts are of secondary importance; the remainder of the period is primary. But this does not necessarily mean that it is credible. Adam sought for a higher measure of truth: how effectively had a knowledge of God's Kingdom been spread. This is the criterion upon which all is tested. Adam is intimately connected with an offshoot of the Augustinian School; everything on earth is a struggle between good and evil. But he has a dissenting view, for he has emancipated himself from determinism and debased Augustinianism. The individual has freedom of choice, and can change things at will.

The Christian mission is particularly dominant—to promote the Kingdom of God on earth—legatio gentium; on this basis every archbishop is judged.

Given this basis, it is difficult to evaluate Adam's historical work when considering it from the point of view of the modern historian.

In common with many medieval historiographers Adam states that it is his duty as an historian to find the truth, and that it is more important to give a true account than to produce a formal flawless description (see Book 3, chap. 71, and the epilogue).

His sources, many of which are unknown, bear witness to considerable insight into the entire surviving literature—clerical as well as secular. In Furthermore, he had access to documents and letters, both authentic and false, in the archives of the church in Bremen. Finally, he relies upon verbal tradition; for example, a Swedish bishop is the source where the Swedish mission is concerned, and seafaring merchants undoubtedly are additional sources. But above all his work is based on Adalbert and Sven Estridsen. The latter is mentioned ca 20 times as Adam's informant. Yet his version of King Sven's own words is scarcely lesser. Adam rewrote them in accordance with his own form of historiography.

Book 4 is based upon an old literary survival (ancient geographers) in addition to a considerable amount of concrete information (see below).

Book 3 is normally singled out because of its elegant, clear, and carefully-prepared composition (Trommer, 1957). It deals with Archbishop Adalbert (1043–72), and, as such, is contemporary history. The book is divided unto 71 chapters.<sup>13</sup>

Book 4 is dedicated to a systematic geographical description of lands that were partly unknown to Christian Europe. Notes on the spread of Christendom via the diocese are worked into it. The account comprises Denmark (chap. 1–9), the inhabitants and tribes of the Baltic regions (chap. 10–20), Sweden and Norway (chap. 21–34), as well as the Orkney Islands (chap. 35), Iceland (chap. 36), Greenland (chap. 37), the "island" of Halagland (chap. 38), the "island" of Vinland (chap. 39), the Frisians' voyages to the North (chap. 40–42). The book concludes by praising God and the diocese (chap. 43–44).

# Dating of GH

According to Schmeidler the work was written between 1075 and 1077, for in Book 2, chap. 26 and 28 Adam mentions Sven Estridsen as being alive, but in Book 2 chap. 43 he refers to him as memorandus,

- <sup>12</sup> For example, Hieronimus, Pseudo-Isidor, Augustin, Virgil, Cassiodor, Gregor of Tours, Bede, Einhard, annals from Corbie and Fulda, etc.; an unknown Saxon chronicle and the old lives of the saints Liutgar, Willibror, Ansgar, Rimbert, and others.
- <sup>13</sup> Chapters 72–78 are only to be found in the B and C families. Adam's work accordingly concluded with chap. 71. After delivering his dedicatory copy to Liemar, Adam added to his own copy appendices giving more recent, supplementary information (chap. 72–78).

i.e., dead. In the midst of writing Book 2 Adam supposedly discovered that Sven was dead.

Since memorandus can be applied to the living as well as to the dead, this theory can de disproved; thus Schmeidler's assertion is not acceptable.

Bolin (1948) dates GH between 1073 and 1075, possibly shortly after March, 1074. – Å. Trommer (1957, p. 248): written ante quem, possibly in the spring, 1075.

## Survival

The trend, composition, and dating of GH should now be sufficiently illuminated; accordingly it is fitting to give closer attention to the survival of the work.

In the Middle Ages GH was used intensively as an historical source in various countries. Thus loans from this work form the basis of learned constructions and embellishments by Saxo and the authors of the Icelandic sagas. Formerly the historians preferred the sagas' and Saxo's elaborate versions to Adam's dry accounts. It was first in 1911, when L. Weibull's dissertation appeared, that GH had its renaissance. The many variants and editions of GH will not be discussed here. The reader is referred to the above-mentioned literary works of Bolin, Schmeidler, and Trommer.

I shall not go into detail here concerning the questions that are connected with the many variants of GH, but shall simply mention that I primarily make use of the A-text, and accordingly adhere to Schmeidler's edition, for the material on Greenland is not expanded in the later manuscripts.

## Greenland in GH

As mentioned above, extremely little material regarding Norse Greenland is to be found in GH, and a good deal of the information contained in it which will be commented upon below does not appear to be reliable.

Book 4, chap. 37 gives a description of Greenland (Schmeidler, 1918, p. 274):

Sunt autem plures aliae in oceano insulae quarum non minima (est) Gronland, profundius in oceano sita contra montes Suediae vel Riphea iuga. Ad quam ferunt insulam a littore Nortmannorum vela pandi V aut VII diebus, quemadmodum ad Island. Homines ibi salo cerulei, inde et regio illa

nomen accepit. Qui similem Islanis vitam agunt, excepto quod crudeliores sunt raptuque pyretico remigantibus infesti. Ad eos etiam sermo est nuper christianitatem pervolasse. 14

I can at once reject the comment: *Homines ibi a salo cerulei etc*. This is one of Adam's customary popular etymologies.<sup>15</sup>

According to Ari's "Íslendingabók" chap. 6 Eirik Rauða gave Greenland its name (see below).

Adam was first in trying to place Greenland geographically. We do not know whether he drew a map of the North, and the text does not contain any direct reference to an accompanying map.

A. A. BJØRNBO<sup>16</sup> therefore felt that it is permissible to assume that the work did not include a map, and studies of GH, particularly with respect to Adam's diurnal journeys, seem to support this view to a considerable degree.

Without taking into consideration all of the earlier literature upon which Adam depended, as well as the philosophy of life that governed his thinking, it is impossible to reach a true understanding of his comments on Greenland and on the northern lands in general.

Adam's studies (Bjørnbo, 1912, p. 72) taught him that the earth was round. Bede visualizes the mainland as circular and surrounded by an oceanic ring. When Adam, the first bearer of information about the new lands, runs into the narrow and dogmatic ancient Roman and medieval Christian interpretations of the world, his concepts become constrained by this and are completely distorted.

The citations in Book 4 chap.  $36:^{17}$  Insula Thyle, quae per infinitima ceteris secreta, longe in medio sita est in oceano — and ultima omnium Thyle and Thyle sex dierum navigatione in septentrionem a Britannia distante are taken from Orosius, Solinus, and Pytheas, and do not necessarily represent Adam's own interpretation. They also partly contradict one

- <sup>14</sup> Translation from the Latin: Book 4, chap. 37: In the ocean there are very many other islands of which not the least is Greenland, situated far out in the ocean opposite the mountains of Sweden and the Rhiphaean range. To this island they say it is from five to seven days' sail from the coast of Norway, the same as to Iceland. The people there are greenish from the salt water, whence, too, that region gets its name. The people live in the same manner as the Icelanders except that they are fiercer and trouble seafarers by their piratical attacks. Report has it that Christianity of late has also winged its way to them.
- <sup>15</sup> Cp. his mention of Skåne in Book 4, chap. 7, p. 251 in C. Henrichsen's translation: Adam derives the name Skåne from the Old High German sconi (schön).
- <sup>16</sup> Adam af Bremens Nordenopfattelse, 1909, p. 126. S. Lönborg (1897) gives an uncritical mixture of text and scholia on more than one occasion, with the result that the depiction of the text, that is, of Adam's original perception of the North becomes false or vague. He has nothing significant to say about Greenland.
- <sup>17</sup> Schmeidler pp. 271-72. (Translation from the Latin, Book 4, chap. 36: The Island Thule, which, separated from the others by endless stretches, is situated far off in the midst of the ocean ...).

another, as 6 diurnal journeys cannot justify the expression:  $per\ infinitum\ a\ ceteris.$ <sup>18</sup>

The assumption that it is possible to sail from the Norwegian coast (Bergen?) to Greenland or Iceland in the course of 5 or 7 days is basically unrealistic.

According to BJØRNBO (1909, pp. 171–73), ADAM locates Iceland north-northwest of Norway; and Greenland, north of the place where Norway and the Riphaean mountain range meet, *i.e.*, northeast of Norway and east (!) of Iceland. This piece of information supposedly stems from Sven Estridsen. See, however, my above-mentioned theory regarding Isleif.

Even though these reports may have been quite correct, because of the medieval authors' schematic presentation Adam was forced, so to speak, to make his view of the world fit into the existing framework to the best possible extent, but he made no attempt to break out of this framework.<sup>19</sup>

With respect to Adam's statement to the effect that the Greenlanders crudeliores sunt raptuque pyratico remigantibus infesti, the sole comment that can be made is that his remarks are unique in the sources concerned with the history of Greenland. No comparable statement was made until 1300, when it turned up in the imaginative and diffuse "Floamanna saga", which must almost be characterized as fiction. Schmeidler (1918, p. 274) assigns it to Sallust. Catil. 44.2; therefore I dare say that it should simply be considered a stylistic embellishment.

Prior to this comment it is stated: Qui dimilem Islanis vitam agunt. In this connection Adam remarks in chap. 36<sup>20</sup>: qui solo pecorum fetu vivunt

<sup>18</sup> BJørnbo, 1909. p. 170. Apropos diurnal journeys to Iceland, in connection with chap. 36 in scholia 154 and 155 there are contradictory accounts compared with the above-mentioned. Scholium 154, which derives from the very early source A-2 from 1100, states: Britannia est omnium maxima insularum. Aqua novem dierum pervenitur ad Thile. According to Schmeidler, this is also taken from Bede's "De natura rerum" Scholium 155 – likewise from A-2 – states: Egredientibus a promunctorio Danorum Alaburg narrant iter esse XXX dierum usque in Island, minus autem, si ventum habeant secundum.

(Translation from the Latin: On leaving the Danish headland, Ålborg, they say it is a journey of thirty days to Iceland, less, however, if the wind is favorable.) I attribute greater significance to this information which must stem from an expert, as it corresponds to some extent to the truth.

<sup>19</sup> Subsequent to Adam several authors such as, for example, Ordericus, described Greenland in his history of the Church that he completed in 1141, as one of the lands of the world and placed it north of Norway. (Orderik Vitals Kirkehistorie, vol. II, 1893, p. 377).

<sup>20</sup> Schmeidler (1918, p. 272).

(Translation from the Latin, Book 4, chap. 36:... The folk who make a living solely by raising cattle and clothe themselves in their pelts. No crops are grown there; the supply of wood is very meager. For this reason people dwell in subterranean caves, content to share shelter, food, and bed with their livestock ...).

eorum vellere teguntur, nullae ibi fruges, minima lignorum copia. Propterea in subterraneis habitant speluncis, communi tectu (et victu) et strato guadentes cum pecoribus suis.

It is true enough that in a footnote to the above-mentioned passage Schmeidler maintains that similar idealistic descriptions of far-away peoples are to be found in the works of ancient authors such as Martianus Capella, Solinus, and others. But I do not hesitate to believe that the passage contains a number of realistic features which Isleif may have transmitted to Adam or to the latter's connections. Adam thus selected that which struck him as the most remarkable and curious parts of the things he learned, and reproduced them adorned with literary loans.

The numerous large stall complexes that have been excavated over the years bear witness to the Icelanders' and the Greenlanders' emphasis on animal husbandry. To be sure, grain pollen has been found at Brattahlid in the walls of "Tjoðhilde's church", but according to expert opinion grain was solely grown for fodder, since the grain could scarcely have ripened, even though the climate was milder at that time. On the other hand, because of the many hours of daylight in the summer the hay grew tall (Krogh, 1967, p. 69) "Konungs Skuggsjá" mentions attempts to grow grain, but on a small scale. Furthermore, it should be mentioned that a number of millstones have been found on the farm sites; these may have been used to grind imported grain.

As far as Iceland is concerned, there can be no objection to minima lignorum copia. It is a fact that in Greenland the only available timber was driftwood, or timber fetched on journeys to Markland. (See below).

Two possible explanations of the statement that the Icelanders lived "subterraneis...speluncis" are: 1) Adam had heard about dwellings with earth and/or turf walls; 2) he confuses these with the pit house, the common Viking age dwelling that has been excavated in several places in Denmark. But there is no evidence to the effect that this type of dwelling existed in either Iceland or Greenland; this also applies to the final remark about one's living under the same roof as one's cattle. The comparatively few 10th and 11th century farms excavated in Greenland to date provide no proof of stalls in direct connection with the dwelling proper. On the contrary, however, this is true of Denmark and Northern Germany. I am inclined to believe that despite the sparcity of material in Iceland, Adam may have transferred this "barbarian" custom from the Peninsula of Jutland and from Northern Germany to the distant Atlantic islands.

The reason why I have taken the liberty here to equalize part of the Icelandic and the Greenlandic modes of life is that to judge by the rather meager finds from Greenland in this period one cannot differentiate between any specifically Greenlandic or Icelandic characteristics.<sup>21</sup>

The rumored coming of Christianity to Greenland is symptomatic of Adam's attitude toward this question. Reports concerning missionary activities in this distant part of the diocese are very foggy, and the church in Bremen does not particularly appreciate the value of such work, cp. appendix "Insule Britannice" 22: ... Grenelande; cuius terrae populi partim se christianos esse dicunt, sine fide quidem et sine confessione et sine baptismate, partim vero, cum similiter sint christiani, Iovem et Martem colunt.

Book 3, chap. 24 and 73<sup>23</sup> contains two pieces of almost uniform information. Prior to these there is a description of the position Archbishop Adalbert held, and how people came streaming to him from Rome itself and from all parts of the world:... maxima omnibus aquilonis populis. And Adam continues:... Inter quos extremi venerant Islani, Gronlani, Gothorumque et Orchadum legati, petentes, ut illuc predicatores dirigeret; quod et statim fecit. Further: Nam et in Daniam, Suediam et Norvegiam et in insulas maris ordinavit episcopos multos...

With respect to these statements Finn Gad (1967, p. 80) comments: "The account gives a strong impression of stylistic embellishments, for in the first place it praises the Archbishop for his never-failing interest in the heathens. The whole passage is built up to a point of culmination. And this is maintained, even though there is no mention of concrete achievements. Adam treats the Archbishop's patriarchal policy just as leniently as he deals with the description of Adalbert's activities in

- <sup>21</sup> In my opinion, in his "Grønlands historie I" 1967, p. 69 F. Gad supports Adam's assertion far too categorically by maintaining that the latter's account of Greenland is realistic. On the other hand he is right in assuming that Adam viewed the whole scene from the heights of his own standard of living: Itaque in simplicitate sanctam vitam peragentes, cum nihil amplius quaerant quam natura concedit, etc. (Book 4, chap. 36).
- <sup>22</sup> Schmeidler, pp. 284-86. Based on two manuscripts that are independent of one another, one from Leiden and one from The Royal Library of Denmark and indicate a close contact with Adam's Book 4.
- (Translation from the Latin: ... Greenland. The people in this land claim that they are partly Christian, though they lack faith, confessions, and baptism. In part they even worship Jupiter and Mars, even though they also are Christian).
- <sup>23</sup> Schmeidler pp. 166-67 and p. 220; the chapters as mentioned above are a later addition and are only to be found in the B- and C-families. (Translation from the Latin: ... especially by the Northern peoples. Of these the Icelanders and Greenlanders, the Goths and the delegates from the Orkney Islands came from the greatest distance, entreating him to send missionaries there, which he immediately did. He also ordained many bishops for Denmark, Sweden, Norway and the Oceanic Islands . . .).

regard to the inhabitants of the distant islands. Consequently, it is scarcely believable that the preachers went out from the Hamburg diocese in accordance with the islanders' prayers."

Poul Nørlund (1929, p. 9 et seq.) apparently gives greater credence to these statements by Adam.

Although I can agree with Gad's comments to some extent, I want to point out that it is true that Adalbert ordained Isleif as Bishop of Iceland. Moreover, it is worth keeping in mind that Adam mentions Icelanders, Greenlanders, and the inhabitants of the Orkneys in connection with his remarks about heathers. This supports the theory that one did not consider them "true believers" (see the excerpts of Book 3, chap. 24 and 73, above), despite Adam's panegyric in Book 4, chap. 36.

Chapter 72<sup>24</sup> tells about Adalbert's plan to journey to the North. In this connection, however, Adam treats him roughly. Yet Adalbert apparently was determined to set out on this journey and planned it as follows: ut circuiens latitudinem septentrionis, hoc et Daniam, Suediam et Normanniam pertransiens inde ad Orchadas extremamque orbis patriam Island posset attingere. GH continues somewhat exaggeratedly – which may be because now that Isleif was ordained, for the first time Bremen considered Iceland truly Christian: Illi enim suo tempore et suo labore conversi sunt ad fidem christianam. The same honor is given to Adalbert in chap. 77. A possible reason why Greenland was not mentioned in this connection is that a diocese had not yet been established here, – as we know, the journey was never carried out.

The following comments are made concerning Isleif's stay with Adalbert: 25... per quem (Isleif) transmisit archiepiscopus suos apices populo Islanorum et Gronlandorum venerabiliter salutans eorum ecclesias et pollicens eis propediem se venturum usque ad illos ut gaudio simul pleno fruantur. We do not know whether these letters ever existed. It is probably doubtful, the phrases employed are readily revised citations of Sallust and the Gospel according to St. John. 26

- <sup>24</sup> Schmeidler, pp. 219-20.
- (Translation from the Latin: ... the northern expanse, *i.e.*, Denmark, Sweden, and Norway, and cross from there to the Orkneys and to Iceland, the farthermost land on the earth ... For in his time and by his efforts these people had been converted to the Christian faith ...).
- <sup>25</sup> ibidem, p. 273. (Translation from the Latin:... Via him (Isleif) the Archbishop transmitted letters to the people of Iceland and Greenland, reverently saluting them and their churches, and promising them that he would come to them very soon, so that their joy could be shared...).
- <sup>26</sup> ibidem, p. 274 notes 1 and 2. Adam's comments on this are that Adalbert deserved praise for his good intentions; he compares him to Paul, who wanted to go to Spain, but never got there.

The striking difference between his comments on Adam's travel plans in the two

The fact that Isleif received a message to the Greenlanders could indicate that the latter belonged to the Icelandic diocese, but we have no evidence of this, apart from the brief mention in HN that Christianity came to Greenland from Iceland. There are no records of any Icelandic bishops ever having visited Greenland or done anything for the church there. And when in the beginning of the 13th Century the Greenlanders asked for a permanent diocese in Greenland, this took place entirely apart from Iceland. (See below).

Some scholars have nevertheless felt that they could prove that Archbishop Adalbert also established a diocese in Greenland. The starting point is scholium 148 (Schmeidler, 1918, p. 268): Hunc Meinhardum et Albertum, alias ordinatos, cum ad se venirent commendavit illis episcopus vicem suam tam per Nordmanniam quam per insulas oceani.<sup>27</sup>

Schmeidler (1917, p. 224) thought that this Albert may have been identical with the bishop Adalbert mentioned in Book 3, chap. 77, concerning whom it is stated: Illuc etiam misit Johannem in Scotia ordinatum et alium quendam Adalbertum, cognominem suum. Illuc repudiates ad Orchadas in the previous passage. To what extent there is a question of the same person can, however, be assumed to be very doubtful. Yet it is true that Albert came as a foreigner to Bremen: alias ordinatus.<sup>28</sup>

The publishers of "Grønlands Historiske Mindesmærker" (GHM, 1845, p. 425) say: Uncertain, yet not improbable. And elsewhere (GHM, 1845, p. 896 and p. 903) Albert is listed as the first Bishop of Greenland.

Professor Hermann Nottarp (1964, pp. 8-11) is a new supporter of this theory. He refers to Albert as the Bishop of Greenland in 1055.

chapters are puzzling. As mentioned above, chapters 72–78 are not to be found in the A-family. Yet there is a possibility that they were first composed at a point when there was a risk of the North's becoming a self-sufficient archdiocese and independent of Bremen. This may be the reason for the numerous reiterations from other places in GH. Through these extra chapters Adam wanted to make it clear that the North always was directed by Hamburg-Bremen. The climax is reached in chap.78, in which the papal bull of 6 January 1053 is stressed. Therefore in chap. 72 he expresses his irritation about Adalbert's inflation of his travel plans and his failure to carry them out, which could have been beneficial to the church in Bremen.

<sup>27</sup> Translation from the Latin, Schol. 148: When this Meinhard, and Albert, who had been ordained elsewhere, came to the bishop he entrusted them with this authority to go to Norway and the Oceanic Islands, bearing gifts...

<sup>28</sup> In his article, "Das Grønlandsbistum Gardar", 1964, p. 8, note 23, H. Nottarp says that in "Danmarcks Riges Krønicke" Huitfeldt already mentions Albert's appointment, but he does not definitely state that it was to the diocese of Greenland.

That Huitfeldt scarcely could have had Greenland in mind at all in this connection can, in my opinion, be proved by his complete omission of Albert from his chronicle of bishops (1653 edition, p. 114) in the list of "Episcopi Gardenses Gronlandia".

But he must admit that there are no reports about Albert's work in Greenland; nor did he have a successor.

Therefore in my opinion there is but a slight basis for interpreting Adam's mention of Albert as the latter's appointment as Bishop of Greenland. I believe that the strongest indication in favor of discussing this question at all at this point of time is contained in the bull of 6 January 1053 which actually does refer to Adalbert's supremacy over the bishops, i.a., in "Grontland". But this does not suffice enough to identify the bishop in question, to say nothing of proving that he or anyone else had been in Greenland.

Other scholars have also maintained that in GH they have found evidence to the effect that Greenland was under Norwegian rule at an early date.

The starting point is Book 3, chap. 17 (Schmeidler, 1918, p. 159): ... ille (Harald Hardrada) Orchadas insulae suae ditioni subiecit; ille cruentum imperium usque ad Island extendit, as well as scholium 146 (Schmeidler, 1918, p. 267) in which it is stated concerning Harald: ... qui et regnum suum dilitavit usque ad Ripheos montes et in Island.<sup>29</sup>

But just at this point it should be mentioned that HARALD HARD-RADA was not among the Nordic kings who were in favor with the Bremen church, which ADAM makes no attempt to conceal.

In the passages just cited above there is not a single mention of Greenland, and no early Norse sources refer to Harald's conquest of Greenland; one wonders, therefore, if it should not be sufficient to refute this theory, not the least because according to Schmeidler (1918, p. 159) the first quotation is a revised quotation from Orosius: ad Indiam quoque cruentum extendit imperium.

In his introduction to HN G. Storm<sup>30</sup> states concerning Iceland's independence of Norway, *i.a.*, Book 4, chap. 35 (cp. also Book 3, chap. 17): Oceanus... habet ex adverso nortmanniae insulas multas non ignobiles, quae nunc fere omnes Nortmannorum ditioni subiacent. And thereupon, as mentioned above, comes a mention of Orchades, Thyle, Gronland, Halagland etc. But Adam distinctly states fere omnes and does not further specify this; consequently there is scarcely any reason for arriving at the abovementioned conclusion.

- A. Ræstad<sup>31</sup> of Norway nevertheless claimed that the above-men-
- <sup>29</sup> Translation from the Latin: ...he (Harald Hardrada) subjected the Orkney Islands to his rule; he extended his bloodstained sway as far as Iceland ...
- <sup>30</sup> Monumenta. HN 1880, p. XXV. Translation from the Latin, Book 4, chap. 35: . . . the ocean . . . off Norway contains many considerable islands, nearly all of which now are subject to Norwegian rule . . .
- <sup>31</sup> In Festskrift til H. Конт, 1933, p. 353. His article can be viewed as a strongly nationalistic, polemically formulated contribution to the debate that followed the Hague Court's decision concerning the sovereignty over Greenland.

tioned reports were correct, among other things because Adam used "Riphei montes" in his geographical placement of Greenland.

To my knowledge, Ordericus Vitalis (1889 edition, p. 377) is the only source that directly states that Greenland was under Norwegian rule before 1261. This is in the passage concerning Magnus Barfor (deceased 1103). It says: "The Orkney Islands and Finland, Iceland and Greenland, which is the northernmost land on earth, and many other islands as far distant as Gothland, are under the sovereignty of the King of Norway..." But in this connection Orderici reliability is very slight.

#### Conclusion

Subsequent to this analysis of GH's rather diffuse and sparse comments on Greenland, the most significant results will be pointed out.

Adam was the first to attempt to place Greenland geographically – even though this was not very successful. His knowledge of the land is very limited, which his use of folk etymologies and loans from ancient writers shows. He is well aware that the Greenlanders have the same way of life, and even though some researchers have expressed doubts about his description of the Icelandic mode of life, it nevertheless reveals certain characteristic features that should be given some credence.

The reason why Greenland appears in GH at all must be seen against the background of Archbishop Adalbert's efforts to have his archepiscopal see transformed into a patriarchate, in which Greenland was one of the pawns — therefore this distant island received its own chapter. Moreover, it is odd that Adam makes no mention of that which a European, in particular, will think of in connection with Greenland: the tremendous natural aspects peculiar to Greenland, the inland ice and the icebergs.

Furthermore, the investigation shows that there is no justification on the basis of GH's text to talk about a bishop of Greenland or that the island was under the Icelandic diocese. The testimony is all too frail. This also applies to the question of the extent to which Greenland was under Norwegian rule prior to 1261. This question will be touched upon once again, namely in the chapter on HN. (See p. 37).

The final conclusion must be that as a source to the Norse history of Greenland GH contains so many uncertain elements, mistakes, and self-contradictions that its worth must be considered extremely limited.

# CHAPTER III

# Ari Þorgilsson: Íslendingabók

The earliest Icelandic source that mentions Greenland is Ari Frodi's "Íslendingabók" (Islb).<sup>32</sup>

Islb summarizes the history of Iceland from 870 to 1120 A.D.

Information about Ari is limited. The surviving fragments of his biography are partly chronicled by Ari, himself, partly by Snorri Sturluson in the prologue of "Heimskringla".

ARI's family came from the region around Breiðafjord. He was born in the winter of 1067/68. "Kristni saga" (H 1892–96, chap. 17, p. 147) mentions him as one of the chieftains who agreed to be ordained as a priest. Perhaps he succeeded to his family's holdings in Vestlandet, and settled at Staðr on Snæfellsnes, where his son and grandson lived. ARI died in 1148.

But Ari's work is mentioned: "The first grammatical dissertation" names him as the first to write in the Norse language, and his work is highly praised. Oddr Snorrason<sup>33</sup> compares him to Sæmundr, both have the surname "froði", and their utterances are "trúlig" (trust worthy).

SNORRI STURLUSON places ARI above all others. He lauds him for being the first to write in the Norse language, and in addition he emphasizes the great significance of his work as a source of information.

This view retained its validity up to and until F. Jónsson, whereas later research sees it in a more sober and critical light.

## Dating

It can be determined with full certainty that the original Islb must have been written between 1122, when Ketill became Bishop in Hólar,

- <sup>32</sup> Extant in two manuscripts: AM 113a fol., designated B, and AM 113b fol., designated A, because it is the better of the two.
- Both manuscripts are the work of Jon Erlendsson, vicar in Villingaholt. The first is dated 1651. Both were transcribed after the same original: M, which is a manuscript from the Middle Ages and has been lost, is dated ca 1200. See F. Jónsson: Íslendingabók, 1930, p. 59. A. Holtsmark in Nordisk Filologi A, Vol. V 1950–52, p. 9. Ó. Einarsdottir, 1964 p. 37.
- 33 "Saga Ólafs Tryggvasonar" p.90 cit. from S. Ellehøj's dissertation 1965. For further information about Ari's authorship, see the above-mentioned work by Ellehøj.

and 1133, when Sæmundr and Porlakr Kunolfsson, the Bishop of Skálholt, died. This presumably ended with aldomót 1120 in chapter X.

A later edition – the preserved revised one – mentions Godmundr Porgeirsson and his 12 years as a "Law-speaker", i.e., from 1123–34. Since medieval chronicles and annals and the like tend to bring things up-to-date, it makes sense to consider the information about Godmundr as an interpolation to these (See S. Ellehøj, 1965, p. 36 et seq., in which he treats the entire discussion about the dating of Islb).

## Ari's Informants and Sources

The names of ten of Ari's informants are known. Nine of these ten are mentioned in Islb. The tenth, Oddr Kolsson, is only mentioned in the prologue of "Heimskringla", but Ari is given as the source (Storm, 1900, p. 5).

Ari's paternal uncle, Porkell Gellisson, who died ca. 1075, provided information about Greenland. Judging from Ari's own statement, Porkell must have been in Greenland himself, where he got his knowledge from a man who went out with Eirik Rauða. Þorkell is also the informant about the period of the landnam. According to S. Ellehøj (1965, p. 63) references that mention the names of informants are not uncommon in medieval historiography and the purpose is always to substantiate the reliability of the information given, and possibly appeal to someone else's authority, thereby disclaiming one's own responsibility for the correctness of the statement. As far as Ari is concerned, however, only the first possibility can come into consideration.

In addition to mentioning his informants by name, Ari describes those qualities they possess that give their statements particular weight from his point of view. For example, Porkell had a long memory – "langt munfi fram" – (Islb 1930, p. 9).

Further justification of Porkell's reliability is a reference to the identity of his informant -cp, the date of Eirik Rauða's landnam.

But not all of the book's contents are heavily laden with references to sources. Frequently it is unclear how much of the account can be attributed to Ari's references, and in other cases Ari fails to refer to any informants, referring, instead, to that which "spacer menn" have told him (Islb 1930, p. 17).

In this connection it should be pointed out that Islb has survived in a rather late transcript, an edition which, as was mentioned above, does not go back to the original manuscript; for this reason I believe that it is extremely likely that it contains possible incorrect transcriptions and insertions by later transcribers. Unfortunately, however, this matter has never been investigated, primarily because to date Islb has been considered faultless in general - all of its information is correct.

The mere fact that Ari obtained his information in his youth from people who then were frequently old and who died prior to 1122 indicates a faulty source. Nor does Ari conceal that his chronology is subject to some uncertainty. S. Ellehøj<sup>34</sup> proves this most convincingly.

I shall not, however, go into Ari's chronological system here, but shall make a few comments concerning a single case, namely, with respect to 1000 A.D. (See appendix to Islb). It should simply be remarked that Ari could have obtained his chronological information from his verbal informants; this information applied to three categories: the length of time involved, relative datings, and statements regarding age.

# Íslendingabók about Greenland

What does Ari have to tell about Greenland? As mentioned above, Greenland's landnam was described in chap. 6. The reason why just this event occupies such a prominent position in his little book must be that the emigration to Greenland took place from the west coast of Iceland – precisely the place where Ari and his family lived; for example, according to the saga tradition Eirik Rauða had lived in Haukadal.

In chap. 6 Ari writes: 35 Land þat es kallat es Grønland fanze bygþise af Islande. Eirikr en rauþi het maþr breiþfirser es for ut heþan þangat. oc nam þar land er siþan es kallaþr Eiriks fiorþr. Han gaf nafn landino oc kallaþi Grønland. oc qvaþ menn þat myndi fysa þangat farar at landet ætti nafn gótt. Þeir fundo þar mana vister beþi austr oc vestr á landi oc

<sup>34</sup> op. cit. 74 et seq.

O. Einarsdottir, op. cit. – p. 30 – as well as S. Ellehøj – op. cit. p. 76. – have shown independently of one another that the announcement about Pope Gregor's death in 604 must stem from Bede's "Historica Ecclesiastica". In addition to Bede, Adam of Bremen's GH is brought up as a source for Ari. See Einarsdottir op. cit. p. 22. The whole problem that this situation involves will be presented in detail in the appendix to Islb below.

<sup>35</sup> Islb 1930, p. 26. "Íslendingabók" chap. 6: On the settlement of Greenland (Translation from the Old Norse): The land which is called Greenland was discovered and settled from Iceland. Eirik Rauda was the name of a Breidafjord man who went out there from here and took land in settlement at a place that has been called Eiriksfjord ever since. He gave the land a name, and called it Greenland arguing that men would be tempted to go there if the land had a good name. In both the eastern and the western parts of the country they found human dwellings, fragments of boats of skin, and stone artifacts, from which it appears that the same kind of people had passed that way as those who inhabited Vinland, whom the Greenlanders call Skrællings. According to what a man who had himself gone out with Eirik Rauda told Thorkel Gellisson in Greenland he began to settle the land 14 or 15 years before Christianity came to Iceland.

keipla brot oc stein smiþi þat es af þvi má scilia at þar hafþi þess conar þioþ farit es Vinland hefir bygt oc Groenlendingar calla Screllinga. En þat vas es hann toc bygva landit XIIII vetrom eþa XV fyrr en cristni qvæme her a Island at þvi er sá talþi fyrir þorkeli Gellisyni á Greenlande er sialfr fylgþi Eirike enom Rauþa út.

It is not difficult to localize Eiriksfjord. On the basis of Ívar Bar-Darson (1930) (see p. 70 et seq.) it is identical with the present Tunugdliarfik in the municipality of Narssaq. It was here that his chieftain's seat presumably lay. As a result of the comprehensive excavations at the village of Qagssiarssuk the opinion is that it was found there.

B. Holbek (1967, p. 24) points out that the word "Grønland" can cover conceptions that are marked by the Celts' (in Ireland) ideas of the land of the dead. Stories of lush green islands in the ocean were numerous in Ireland long before the Norsemen colonized Greenland, and on several medieval maps one can also find islands that symbolize this concept. The entry to the effect that they, i.e., the Greenlanders, found signs of human occupation "behi austr oc vestr à landi" is not without interest; undoubtedly this must be interpreted as being in the Eastern settlement and the Western settlement, respectively.

Over the years this part of Islb has been explained in numerous ways. F. Nansen (1911, p. 347) views it as "a somewhat stylistic turn of phrase by the sober Ari, who found it more worthwhile to emphasize this kind of obvious indication rather than a possibly less reliable report about the people themselves".

Besides I agree with Nansen's belief that the Greenlanders did not see the Eskimos – only their deserted settlements. Therefore Ari explicitly states that the above-mentioned implements must stem from the kind of people who lived in Vinland, namely the Skrællings. Since it concerns finds from the Eastern settlement as well as the Western Settlement "so it also shows that the Eskimos' stay in South Greenland cannot simply have been a temporary and brief summer visit" (Nansen, 1911).

The names "Groenlendingar" and "screllingar" are always used in the Icelandic sagas and elsewhere in regard, respectively, to the Norsemen living in Greenland, and the people in Vinland and the Eskimos in Greenland.

Regarding the last-named, P. Nørlund (1967, p. 123) suggested in 1934 that this name derives from the Eskimo kalâleq, pluralis: kalâtdlit, which the Eskimo people call themselves by to this very day. His theory was first invalidated in 1961, when Robert Petersen (1961, p. 123) proved that this name is very late; presumably it really first came into use in the early 1900's. The Eskimos have called themselves "inuit", *i.e.* people. We still do not know where kalâleq came from, but perhaps it derives from Europe. B. Holbek (1967, p. 297) points out that the

designation Skrælling can be related to the German: "Schrähelein" – a dwarfed figure, a manikin, a characterization that can be used for pixies or trolls or little people who live in the mountains. F. Gad (1967, p. 30) who bases his view on the latest Eskimo-archaeological results, goes along with Eigil Knuth, who has rehabilitated Ari's account of the abovementioned place. He comments that previously this was not believed to be true, as it fails to mention dwellings. But now we know that the remains of Paleo-Eskimo dwellings were nothing but a low stone setting and a modest earthwork, and a site of this kind is overgrown relatively quickly, even in the sub-Arctic areas.

Carbon 14 datings have shown that the Eskimos remained in the northern part of the area until some point in the 800's. This does not, however, preclude the existence of the Dorset Culture elsewhere in Greenland until as late as the 900's.

Thus, in my opinion there is nothing to prevent Ari from being considered reliable here, even though one may be a bit skeptical, since the informant Porkell Gellisson died when Ari was 7 years' old! Porkell had his information from one of Eirik's associates. But his informant must have been elderly, for according to Ari's chronology the settlement of Greenland supposedly took place starting in 985 or 986. Islb is, moreover, the only written source that gives such a narrow relative dating.

Scattered throughout the Norse literature there are entries – also about Greenland – that are attributed to Ari, but they are not to be found in the surviving Islb. According to some opinions these can be traced to the first edition of Islb. Others have maintained, however, that Ari wrote a Landnámabók.

In this connection it should be mentioned that scholars have also wished to give him the credit for having written a history of Norway; Arr's possible authorship of a Landnámabók will, however, be treated in the appendix to Islb.

### Conclusion

Greenland's prominent placement in Islb can be summarized as follows:

Without doubt Ari's work is worthy of no better designation than nationally self-asserting. The purpose was, i.a., to give prominence to a "gesta Islandorum" in general, and to the people of Vestlandet and Nordlandet in particular. Greenland enters into the picture in both cases. Ari begins chap. 6 with a statement that doubtless cannot escape being accused of containing a certain portion of pride: Land pat es kallat es Groenland fanze oc bygpisc af Islande. There probably is no question

that the discovery and colonization of Greenland impressed the Icelanders of the time. And, as mentioned earlier, Ari knew how to thrust his land and his family into the foreground; therefore one should take notice of the characterization of Eirik Rauða – he was a "maþr breiþfirþscr". Ari completely ignored the tradition, with which he presumably was familiar, which depicts Eirik as a somewhat quarrelsome emigrant from Jæren in Norway who, because of unruliness during the years he spent in Iceland had to change his residence no less than three times, fled from Iceland as an outlaw – and discovered Greenland.

Thus, it is most essential to Ari to make it clear that it was an Icelander who discovered Greenland and settled there; it is of minor importance to him to describe the past history of the island up to the time when Islb was written. Evidently this was of no significance as far as the purpose of the work was concerned.

Nevertheless, the information he provides, supplemented by the detached sentence from Landnámabók (see appendix to Islb), is very trifling. And one wonders why the entry about the Skrællings' remains is given such high priority at the expense of a more detailed description of the Greenlanders' society. A possible explanation may be that by writing as he did Arı had the opportunity of including Vinland in the picture, thereby placing the Icelanders in an even more dazzling light. Yet it can also be attributed to two things: 1) that Arı did not know much more than he reported and that has survived 2) that at the period of time in question the Greenlanders' life did not differ very much from the Icelanders', and therefore there was nothing exceptional to tell. Probably the latter is the most likely – yet there are but a few things that can be proved by archaeological methods.

The entry that places Greenland in a chronological connection is the most important one. Although it is true that relative chronology is subject to some uncertainty, this is unimportant in this connection, where it is established that the colonization took place during the last two decades of the 900's and thereafter.<sup>36</sup>

<sup>36</sup> I see no reason for concerning myself now or later on with the chronology at the close of the 900's and the beginning of the 1000's as F.Gad has done (1967, pp. 46–70; 1964, p. 89 et seq.) for I dare say that the material contains so many sources of error that there is no justification for setting up any absolute chronology on the basis of the information provided by the saga texts.

# CHAPTER IV

## Historia Norvegiae

## Survival

"Historia Norvegiae" (HN) is only known through a transcript which was made between 1443–60 (Monumenta historica, 1880, p. XVII). This was found in 1849 in a private Scottish archive by P. A. Munch, who in 1850 effected the first edition of the work: "Symbolæ ad historiam antiquiorem rerum Norwegicarum". Later on — in 1880 — G. Storm published an orthographical edition of HN in "Monumenta historica Norvegiæ". 37

HN now exists as a fragment. According to the anonymous author's plan, which is described in the prologue, his task was to describe the location of the country, explain the family relationships of the sovereigns ... rectorum genealogiam ... as well as to describe adventum christanitatis simul et paganismi fugam, and the religious position of Norway at the time (Mon. p. 71). Unfortunately we have nothing that goes beyond Olav den Hellige's arrival in Norway.

The Scottish transcriber was unable to read all the Norwegian names and misinterpreted the literal symbols in many places. For this reason A. Steinnes (1946–48, p. 5) believed that the transcriber must have had the actual original as his source. But one thing is certain – apart from a single instance – it has been impossible to determine traces from HN in other known Norwegian-Icelandic manuscripts, which could indicate that the original never was in Norway.<sup>38</sup>

## The Author

Since all our knowledge about the author can only be obtained from his work, several proposals have been made; some of these will be mentioned.

- 37 This edition has been used in this investigation.
- <sup>38</sup> Steinnes further believes that it would not be unreasonable to presume that the Norwegian-Icelandic sources upon which the list of Swedish kings up to 1333 is based mainly derive from the same sources, which were found on the Orkney Islands namely, HN.

F. Jónsson (1920–23, II, p. 598) maintained that it was a question of a foreigner living in Norway and naturalized there, and at that, probably an Englishman or a German. In the opinion of other scholars there is no doubt whatsoever that he is a Norwegian. H. Koht (1921, pp. 226–30) believes that the author is a Master Arnulf from Trøndelagen, and calls the work "Den fyrste norske nationalhistoria". A. Steinnes favors a Peter of Husastad, a follower of archbishop Eirik when the latter was in Denmark for political reasons between 1190 and 1202.

SVEN ELLEHØJ (1965, p. 143) does not present other hypotheses, but simply states that it is a fact that the author is a Norwegian, pointing out, as Storm also does, that the expression reges nostri is frequently used with respect to the Norwegian kings, and that St. Olav is "Olavus noster".

Judging from the many quotations from Vulgata the man must be a clergyman, and he could have resided in either Bergen or Trondheim.

HN is written in fairly ponderous Latin. According to E. Skard (1935, p. 76), the author modelled his work on several stylistic patterns; evidently it is difficult to find a contemporary historian who writes in as forced a style as the author of HN.

Storm found that the vocabulary showed traces of French origin. Koht (1921, p. 225), along with Gertz, has suggested English-Norman influence, but, as Ellehøj points out, they have not given any evidence to this effect. Perhaps it is a question of a pupil's work dedicated to the reader – the Agnellus mentioned in the prologue. (With respect to the identification of this person reference is made to Koht, 1921, p. 221 et seq.).

## **Dating**

There has been no lack of suggestions concerning the dating of HN. H. Koht (1921, p. 212 et seq.) points out that what we know about Norse-Icelandic historical works is limited to the 12th century, namely, Sæmund's lost work from 1133, Theoderici from the late 1170's, Passio on Olav den Hellige from the 1170's, Odd's and Gunnlaug's works from ca 1200, as well as a few others. And that is all.

Among the many contributions to the dating of HN the following can be mentioned (cit. from Koht, 1921, p. 211): K. Maurer dated it 1266 and preferably still earlier. P. A. Munch proposed that it was first written about 1300, but subsequently changed the date to ca 1250. E. Meissner: between 1260 and 1266. F. Jónsson between 1215 and 1230. E. Mogk: the first decade following 1200. A. Steinnes: possibly in 1195, when Archbishop Eirik was in Denmark (see above) (NHT, Vol. 34 p. 52 et seq). S. Nordal: scarcely earlier than ca 1200 and written by request of a foreigner (NK, Vol. VIII B, p. 205). H. Koht substantiated

his dating – at the latest 1170 – quite convincingly, and S. Ellehøj (1965, p. 144 et seq.) also agrees with his interpretation.

In particular the expression *tributariæ insulæ* has led to a dating subsequent to 1260.

Part I of HN is a geographical description of Norway and the Norwegian places abroad; according to E. Koht (1921, p. 213) the mention of the latter as tributariæ insulæ does not imply constitutional status. The author differentiates between "tributa" paid separately by Suðereyjar, the Orkney Islands and the Faeroes – but no such comment is made about Iceland. The Icelanders considered themselves Norwegians, 39 and if they came to Norway they paid taxes to the king and went to the wars with him.

Much weight should also be placed on the circumstance that from 1152 Iceland (and Greenland) belonged to Norway in a religious sense subsequent to the establishment of an archbishopric in Trondheim.

## HN's Sources

Regarding his sources, the author informs us in the prologue in the vague terminology that is characteristic of medieval historical literature that with respect to the earliest period he does not provide anything he himself has written:... nihil a me de vetustatis sine novum vel in auditem assumpserim, but has relied upon the earlier writers' accounts:... in omnibus seniorum assertiones secutus... Only when he found something concerning his own time which was worth relating did he add it himself.

The most important foreign sources include Adam of Bremen's work, as well as Honorius Augustodunensis, whose "Imago mundi" the author confuses with "De mirabilibis mundi" by Solinus. E. Skard<sup>40</sup> proved this mistake, and many things in HN also show that there are loans from the above-mentioned work of Honorius from the 1120's, for example, in the part about earthquakes and other natural catastrophes in the section about Iceland.

HN contains loans from GH from the prologue, from Book 2, and for the geographical explanation of the northern lands as given in Book 4. In certain places the author copies Adam's style and model, and even

- $^{39}$  "Norges gamle Love" I, pp. 437–38. This independence of the Norwegian king also appears in GH Book. 4, chap. 35 see above although Adam expresses himself categorically in quite a different way.
- <sup>40</sup> op. cit. pp. 77-82. This confusion caused A. Steinnes to assume that HN's author made use of the "Sorømanuscript" that was destroyed when Copenhagen burned in 1728, as well Adam's and Honorii works, and with respect to the lastnamed it could readily be considered a part of "De mirabilibis mundi" (op. cit. p. 29 et seq.).

gives quotations from GH. Accordingly, he must have had Adam's entire work at hand.41

## Greenland in HN

As mentioned above, S. Bugge pointed out that HN's geographical survey was written according to Adam's pattern. As the following will show, however, HN's author did not feel that he was committed to Adam's view of the world: 42 Quidam tamen nautæ cum de Glaciali insula ad Norwegiam remeare studuissent et a contrariis ventorum turbinibus in brumalem plagam propulsi essent, inter Viridenses et Biarmones tandem applicuerunt, ubi homines miræ magnitudines et virginum terram (quæ gustu aquæ concipere dicuntur) se reperisse protestati sunt. Ab istis vero Viridis terra congelatis scopulis dirimitur; quæ patria a Telensibus reperta et inhabitata oc fide catholica roborata terminus est ad occasum Europæ, fere contingens Africanas insulas, ubi inundant oceani refluenta. Trans Viridenses ad aquilonem quidam homunciones a venatoribus reperiuntur, quos Scrælinga appellant; qui dum vivi armis feriuntur, vulnera eorum absque cruore albescunt, mortuis vero vix cesset sanguis manare. Sed ferri metallo penitus carent, dentibus cetinis pro missilibus, saxis acutis pro cultris utuntur.

Following a brief commentary on the "coastland" of Norway (Zona maritimus) HN continues: 43 . . . quæ patria (Hålogaland) in aquilonem

- $^{41}$  It was Sophus Bugge who in ÅNOH 1873 seized upon the many similarities between GH and HN.
  - 42 Monumenta p. 75 et seq.

Translation from the Latin: Some seafarers who had struggled home from Iceland to Norway but who were driven into the cold belt by a violent storm and finally found land between Greenland and Bjarmeland, told us that it was true that they found fantastically big people there, and a land where there were virgins, about whom it is said that they became pregnant by drinking water. Greenland is separated from these (regions) by Icebergs, and this land, which the Icelanders have found and inhabited and strengthened by Catholicism, are the extreme western borders of Europe and almost stretch as far as the African islands, where the ocean joins the rivers. On the other side of Greenland, toward the North, hunters have found some little people whom they call Skrællings; their situation is that when they are hurt by weapons their sores become white without bleeding, but when they are mortally wounded their blood will hardly stop running.

They have no iron at all; they use missiles made of walrus tusks and sharp stones for knives.

43 ibidem p. 78 et seq.

Translation from the Latin: With that land (Hålogaland) Norways ends toward the North and continues to the place called Wegestaf, which is the boundary of Bjarmeland. This is the very deep bay in the northern sea, with Charybdis and Scylla and whirlpools from which one never escapes; this is the deep frozen fjeld that calves stout icebergs in the sea, grown great by struggling river waters and thickened by ice water. Against their will numerous traders who journey to Greenland run into these and suffer shipwreck, so that they are greatly endangered. In addition there are large whales of different kinds that break apart the strongest ships, swallow the

terminat Norwegiam juxta locum Wegestaf, qui Biarmoniam ab ea dirimit. Ibi ille profundissimus septentrionalis sinus, qui Charybdim, Scyllam et inevitabiles voragines in se continet; ibi et promontoria congelata, quæ immensas glacies fluctivomis inundationibus augmentatas brumalique frigore concretas in maria præcipitant, quibus crebro institores Viridem terram petentes inviti applicant sicque naufragium passi periclantur. Ibi etiam cete grandis diversi generis fortissimas naves confringentia, nautis diglutiunt, quosdam submergunt. Ibi equini ceti monoculi jubis diffusis profunda pelagi sulcantes ferocissimi reperiuntur: illic pistrix, illic hafstrambus, maxima bellua, sed sine cauda et capite solum susum et jusum dissiliendo veluti truncus, non nisi nautarum pericula præfiguret, apparet. Illic hafguva et hafkitta præ cunctis marinis monstris maxima et cetera hujuscemodi infinita reperiuntur.

In regard to the designation *Viridis terra* – a Latinization of the word Greenland – I refer to the comments I have made above in the section on Islb on "the green islands".

The sentences quoted above testify that in addition to GH the author must have relied upon a Norse tradition, for it is quite clear that in contrast to GH, HN assumes that Greenland and Russia are connected with one another by land, and that the lands discovered south of Greenland belong to Africa. G. Storm (cit. from Bjørnbo, ÅNOH 1909, p. 209) calls this interpretation of the northern view of the world an attempt at mediation. Apparently HN's author also treated Adam's geographical information in a similarly critical way as the description of the events involving Olav Tryggvason was handled. One can almost say that he adapted them to northern conditions. Yet it is possible to deduce from this that in 11th and 12th century Iceland and Norway an independent geographical system developed, a system which in theory and purely formally was in agreement with the Roman cosmography as the latter was worked out by Macrob and Isidor and which, i.a., was taken over by Adam; in reality, however, this brought with it a radical revision of the picture of the world. The discovery of Greenland and parts of America were basic to this view. In general, the location of these lands was correctly comprehended, but for several reasons, i.a., in order to maintain the theory of a mainland surrounded by the ocean, it was assumed that Greenland was a ramification of Russia and thought to be situated on the western border of "Storhavet" (the great sea). The North American

sea-farers or drag them into the sea. There are one-eyed walruses with waving manes who plough through the depths of the sea and advance wildly, there is the whale, and there is the merman, that tremendous wild beast without head or tail, so that it looks like a tree trunk when it hops up and down, and it appears to be dangerous to the seafarer, there is the havkraken and the wolffish, the largest of all of the sea's monsters, and besides there are endless numbers of the same kind.

mainland (Vinland) was another extension – of Africa! HN's author therefore visualized the Norwegian Sea as a large fjord.

The legends about the virgins (the amazons) and the giants recur in GH, Book 4, chaps. 19 and 41.

Ari already reported that the Icelanders found and settled Greenland, but it is news that they also christianized Greenland. This is the first time that this information appears in the Norse survivals; undoubtedly it is most interesting, for one dares to pressume that since HN's author was a cleric, he must have been well-informed in this respect. But why did the otherwise so knowledgeable Ari fail to include this in his Islb? For it would indeed have fit well into the framework of his work.

If one views this entry in relation to GH's account about Bishop Isleif, to whom Adalbert gave a message to take to the Greenlanders, it supports the conjecture that about the mid-1000's Greenland was more or less subject to the Icelandic bishop's sphere of interest, and therefore it is natural that on the part of the Greenlanders one bypasses Iceland – at that at a period when there were interior difficulties (see appendix to Islb) – but approaches Norway directly, as one desires a bishop of Greenland. This demand could never have won support or sympathy in Skálholt or Hólar.<sup>44</sup>

HN's comments about the Skrællings have been the subject of more discussions than Ari's in Islb. This must be viewed against the background of the far more dramatic character of the entry in HN. That HN's author has learned about the Skrællings from Ari and others, alone appears from the word "Scrælinga", which is the same word – even as far as spelling is concerned. But there are no sources from the 1000's and the 1100's which relate that the Greenlanders met Eskimos in West Greenland. The first testimony of this appears in HN.

It has not yet been possible to find the source of the description of the Eskimos – the small people who are so strange because upon being struck by weapons their sores grow white without bleeding as long as they are alive, but when they are dead their blood almost does not stop flowing.

E. Skard<sup>45</sup> made persistent efforts to arrive at HN's sources of a natural-historical nature, above and beyond those found in Adam and Honorius. Unfortunately, however, he was not successful.

<sup>44</sup> The development of the tradition concerning the introduction of Christianity in Greenland will be treated later in the section on the Icelandic sagas.

<sup>45</sup> op. cit. p. 82 et seq. – He points out that HN contains a good deal of information of a natural-historical as well as a geographical character which were generally known at the time, and parallels of which are to be found in "Anonymus Leidensis", "Ethicus Hester", "Giraldus Cambrensis", "Nennus", and "Chronicon Lethrenses". But it is impossible to point out a reliable source. Perhaps the Honorius edition in the "Sorømanuscript" was more comprehensive than the one that is otherwise known.

A final result can solely be achieved by a critical study of the entire geographical material that the Middle Ages took over from Antiquity, and which was worked over and supplemented by new things. Only this method of procedure is capable of shedding light on this problem.

I am most inclined to believe that HN's author colored his description of the Greenlanders' meeting with the Eskimos with features that can stem from tales about fabulous beings such as pygmies or little troll people similar to those one finds in Olaus Magnus (Holbek & Piø, 1967, p. 311).

In spite of this, however, there is no reason to believe that the remainder of the work lacks a certain amount of realism. F. Nansen<sup>46</sup> is of the opinion that the correct account of the Skrællings' weapons must derive from well-informed sources, and the report proves that the Eskimos and the Greenlanders met one another in Greenland in the 13th century (!); at the same time, however, it can indicate that at that time the Eskimos were not to be seen in the vicinity of the settlements for HN relates that hunters met the Skrællings north of the settlements, which must mean that it is a question of the Norðsetr and Krogsfjordshede localities.<sup>47</sup>

Nansen also believed that the comments regarding their wounds, connected though they are with the legends, could indicate that they fought with the hunters "who, in the manner of Vikings, handled roughly; but it simultaneously reveals that the Skrællings were viewed as troll-like creatures."

P. Nørlund (1967, p. 123 et seq.) agrees with Nansen's interpretation on the whole, but adds that in all probability the two races met one another from the outset with deep mistrust and mutual enmity!

Since the time when the previously mentioned authors wrote their works Eskimo archaeology has become intensified; yet the results of this must still be considered temporary until the day comes when sufficiently representative material is available as a basis. F. Gad<sup>48</sup> has discussed this question most recently. Nevertheless he leans to this doubtful field and points out that at Sermermiut (near Jakobshavn) the neo-Eskimo midden contained several Norse objects, for example, a cover for a spoon case ornamented with a strictly symmetrical looped ribbon motif which is suggestive of the 13th century. Another object had early Gothic ornamentation.

It is quite true that these finds show that the Eskimos were confronted with the Norse culture, but in the first place HN cannot be placed in connection with them, since it is earlier than the things mentioned.

<sup>&</sup>lt;sup>46</sup> op. cit. p. 348 et seq. He goes along with a dating of HN in the 13th century.

<sup>47 &</sup>quot;Grænlands Annál eitt eptir Hausbók" GHM III, p. 238 et seq.

 $<sup>^{48}</sup>$  1967, p. 111 and p. 126. In regard to HN's dating: "HN's original may stem from before 1300".

Secondly, middens – whether Eskimo or Norse – provide an unreliable basis upon which to build up a chronology. The stratigraphy has often been disturbed by both people and animals. Thirdly, the dating is terminus post quem as far as the objects' production is concerned – nothing is known about their age at the point when the Eskimos acquired them. Finally, I do not believe that, like Gad, one can interpret these finds in such a way as to supplement the picture with more peaceful phenomena between the two peoples. It can, for example, be a matter of stolen goods!

On the basis of the source materials now available we have no knowledge of how a possible meeting between Eskimos and Greenlanders took place in the 12th Century. And HN's somewhat hazy information only permits very cautious hypotheses.

In the following chapter on the natural conditions in the Greenland Sea the whole fantastic narrative contains certain things that indicate that the author has information from people who have been in these regions; for example, this is the first time in Norse historical writing that one hears about icebergs and calving glaciers, and about the danger in which the icebergs generally placed navigation. In addition there are the threats that with the help of imagination took on the shape of fabulous sea monsters. Here the author obviously supplements the fabled animals described in the Latin words with the more local ones in the North, which are presented in partially Latinized forms such as hafstrambus (Old Icelandic: hafrstrambr) and hafguva et hafkitta (O. I.: hafgufa ok hafrkitti).

The author may have taken the non-Norse designations from PLINY the Elder's "Historia naturalis", or, perhaps, which is more likely, from the geographical "encyclopedia" that Solinus prepared.

A more thorough characterization of the whales, the walruses (not the one-eyed ones, however), hafstrambr = the merman = the hooded seal?, hafgufa = havkraken = originally a large whale, later, more likely a giant octopus?, and hafrkitti = the whale-like basking shark? — is given in "Konungs Skuggsjá", which is believed to have been written ca 1250–60 or even at 1200, but HN shows that a knowledge of these fabled animals may already have been widespread in Norway as much as 50–100 years earlier.<sup>49</sup>

Beyond this HN gives no further information about Greenland – the description of the *tributariae insulae* only mentions the Orkney Islands, Hjaltland, Suðereyjar, and the Faeroes (see above).

Regarding Olav Tryggvason's efforts to introduce Christianity it

<sup>&</sup>lt;sup>49</sup> In regard to fabled animals and the like I have consulted the following literature: Part 2 (commentary volume) of "Konungs Skuggsjá" 1921. J. Anker & S. Dahl, 1938; Ноlbek & Ріб, 1967.

Concerning the problems with respect to the dating of the individual parts of "Konungs Skuggsjá" (see above), the section on Greenland may be earlier than 1250–60.

is narrated: <sup>50</sup> Sicque factum est, ut infra quinquennium omnes tributarios, id est Hialtlendenses, Orchadenses, Færeyingenses ac Tilenses fide præclaros, spe gaudentes, caritate ferventes redderet Christo...

HN has already explained why Greenland is not mentioned in this connection. Finally, it should be stressed that in the comments about the lands Olav christianized the words *omnes tribuarios* are employed, which should perhaps also be seen from a clerical point of view.

The silence which envelops Greenland in regard to these points seems very puzzling, especially since as far as the church is concerned the land belonged under the Trondheim archbishopric, and prior to this two Norwegian clerics were appointed bishops of Gardar in Greenland (e.g., Dipl. Norv. XVII B., p. 280 et seq.), Greenland is only placed in relation to Norway in connection with the actual geographical description. It should be kept in mind, however, that HN is but a fragment that ends directly after the year 1000, but it is by no means improbable that precisely from that date on Greenland appears in the historical presentation.

#### Conclusion

I have extracted as much from HN here as I deem justifiable, as next to Islb it is our earliest Norse source concerning Greenland. The result of the investigation may seem rather poor at first glance, but the new information HN provides will be summarized as follows:

- 1) Greenland becomes part of the Norse picture of the world.
- 2) Navigation in Greenland is dangerous because of icebergs, storms, and so forth.
- 3) The Icelanders brought Christianity to Greenland.
- 4) OLAV TRYGGVASON did not bring Christianity to Greenland.
- 5) Greenland is not included among the tribute islands.
- 6) Greenlandic hunters have met Eskimos in North Greenland but we do not know what this led to.
- 7) Some myth material, which is believed to have extremely little value as a source.

Translation from the Latin: And so it happened that within five years he gave over to Christ all the people of the tribute islands, folk from Hjaltland, the Orkney Islands, the Faroes and Iceland – superb in faith, happy in hope, and burning with love . . .

<sup>&</sup>lt;sup>50</sup> Monumenta p. 116.

#### CHAPTER V

## Íslendingasögur

In this, the main section of this paper, the two most well-known sagas about Eirik Rauða will be analyzed along with the chapters in "Landnámabók" that deal with the same subject. But first it will be necessary to discuss the genre of sagas to which these two belong, as well as the problems "Landnámabók" involves (cf. appendix).

The word "saga" – utterance, verbal communication or narrative – is common to the whole of Scandinavia. Saga was used for the first time to describe a written narrative of a certain length about 1200 in Iceland.<sup>51</sup>

"Eiriks saga Rauða" and "Groenlendinga saga" are placed with the group of saga literature that has now been given the common name of "Íslendingasögur" (Isls), a name which is significantly more meaningful than the much used name: family sagas, for Isls does not deal with family history. These are secular tales that concern the Icelanders in the Viking Age, and the stage on which the events take place is for the most part Iceland (KLNM VII, pp. 496–513). Many Isls begin with the colonists – may also make mention of their fathers and forefathers, but primarily take place subsequent to the end of the landnam period – ca 930 – and prior to the middle of the 1000's. This period of time is frequently called söguöld.

The origin of the saga writings may be pættir; these little stories concern an individual person or a single event, in all instances dramatic situations that usually are related in a terse and pithy style, and they often contain a sharp point and polished dialogues.

#### Survival

The texts have survived partly in medieval membranes or in fragments of these parchments – the earliest date from ca 1250 – others only exist in later paper manuscripts.

<sup>51</sup> S. Nordal in N.K. Vol. VIII B, p. 180 et seq. "Saga" does not appear in "The first grammatical dissertation's" listing of the literary genres that were cultivated in Iceland 1150–80.

In the nature of the case, the following presentation of Isls as literary history must be based on the considerable material that is available on the subject. On the other hand, a more independent view with respect to the reliability of the sagas as sources, as well as the analyses of the selected texts, is aimed at. It is of great importance to the survival of the texts when they exist in several medieval manuscripts that are independent of one another, or in reliable transcripts of such manuscripts.

Some sagas are lost, but are mentioned, e.g., in "Landnámabók". In other cases their existence is evinced in the form of excerpts. Furthermore, a few are mentioned in other sources; finally, some must be assumed to have vanished without a trace (Sveinsson, 1958, p. 30; Jóhannesson, 1941, p. 176).

It has been believed in general that the survival of the texts in manuscript form was unreliable — as a result of the successive revisions the original text would have to remain unexplained. E. O. Sveinsson (KLNM VII, col. 497 et seq.), believes, however, that one should be wary of generalizations. Sometimes a text can inspire confidence because it contains old characteristics, for example, linguistic and stylistic, but usually the valid rule is: testis unus, testis nullum — one must have several texts for purposes of comparison, and even fragments can provide invaluable information. Formerly our scholars tended to assume that amplifications and interpolations were made in the course of time, and at times rightfully, but in recent decades one has come to the conclusion that abridgement was usual.

In the past the prevalent view was that a saga text always was faultless and perfect; possible objections to the preserved text were attributed to survival. But according to E. O. Sveinsson (see also appendix to Isls) the opposite can also be the case. In judging a saga consideration must always be given to our knowledge or lack of knowledge about the history of the text.

#### Scaldic poems

In setting up his typological grouping of Isls, S. Nordal (1953, p. 249) noted that in regard to the basis of the tradition the groups differed. All of the earlier sagas contained a considerable number of stanzas or verses. The question of the authenticity of these will not be discussed here, as the number of separate verses contained in the two Greenland sagas is very limited. Yet there are a number of linguistic grounds for believing that a large part of the poems quoted in earlier Isls can be old. In addition, it is possible that lost verses may have been the original sources. The scaldic poems have always called for comments, and the separate ones, in particular, were frequently the core of a saga (Sveinsson, 1958). Beyschlag's (1953, pp.109–139) theory about "Begleitprosa" is scarcely tenable. The very different ways in which the poems are presented in the sagas and the clear divergences that can be noted between the verses and the accompanying prose texts do not seem to

strengthen this theory. More probably this could be indicative of several sources for the saga in question.

#### The Authors

Isls's existence must be attributed to persons who must be designated as the authors of the sagas, and not simply their recorders. In opposition to this argument Isls's uniformity has been stressed; supposedly it was only a matter of passive recipients and transcribers of a uniform tradition. But it appears that the individual sagas are amazingly different, even though one author learned the form from another author. Another argument in favor of the theory that it simply was a matter of a transcribers was the anonymity of the sagas, but on the whole the old Icelandic prose literature is notable for its anonymity. With but very few exceptions we can only give thanks to the transcribers for our knowledge of the authors' names, ep. "Heimskringla" and "Edda".

## "Buchprosa" and "Freiprosa" theories

I mentioned above some of the principal divergences that have dominated and, to a certain extent, hampered the study of Isls in the major part of this century.

Under the catchwords "Buchprosa" or "Freiprosa" which German research (Heusler, 1914) created, it has been debated whether the sagas came into being via oral narration or whether they first acquired their artistic form by means of a writer with pen in hand. Are they reliable historical accounts, or simply historical fiction?

The most consistent adherents of the "Freiprosa" school considered Isls in particular as reliable historical accounts that took shape shortly after the events referred to had taken place. The sagas accordingly were composed at a pre-literary phase. The text was preserved by oral tradition until a narrator dictated it to the chronicler, who could then make additions and alterations, but within the framework which each oral narrator allowed himself.

Along with A. Heusler, Knut Liestøl (1929) is one of the most prominent advocates of the "Freiprosa" theory. He realized that all sagas could not be lumped together; first, he wanted to arrive at an understanding of how the saga's oral tradition had developed. But since Liestøl and his adherents did not make the necessary differentation between the written, extant work and the simply presumed oral "saga", it is often difficult to know what is meant. The Freiprosa school is an hypothesis that takes a definitive attitude toward the extant texts; its most significant parts must be designated as postulations (Sveinsson, KLNM VII col. 498).

"No doubt only a minority of scholars has as simple a view of the picture as that presented by the "Freiprosa" school. There are many intermediate steps between the two theories, and one differentiated among the more or less reliable Isls. But because of its very existence the "Freiprosa" school has delayed recognition of the historical tradition's unreliability". (O. Olsen, 1965, p. 20).

Whereas Liestol primarily emphasizes the tradition and the oral pre-phase and studies the sagas from the point of view of a folklorist, S. Nordal and O. E. Sveinsson<sup>52</sup> have chosen to take the opposite view They start out with the sagas as written works of art and endeavor by way of induction to arrive at general conclusions. The goal thus is not to find the single parts of the mosaic, but the whole. The sources of the text are unknown and must be tracked down, yet the sagas' text gives information about sources that seem to form a basis for further investigation: 1) quotation of poems and ditties that are claimed to be old, as a rule composed by the principal character; 2) references to oral tradition, e.g., one says, some others say. These expressions have never been thoroughly examined, but it is likely that in the earlier sagas they really refer to oral tradition – later they are nothing but literary clichés; 3) quotations from other writings.

The existence of the writer of the sagas is also a fact; he is responsible for the entire saga material that has survived.

Nordal and Sveinsson and their pupils compose the "Icelandic School" in the field of saga studies. They uphold the "Buchprosa" theory in its most extreme form in opposition to Liestøl and his disciples.

#### The Value of Isls as a source

A question with which saga research has been much concerned is the extent to which that tradition which forms a part of isls can be considered in agreement with reality, a tradition which presumably existed originally, has been preserved or was lost during the oral survival.

<sup>52</sup> Nordal's publication of "Eigla" in 1933 and his studies of "Hrafnkels saga" in 1940 are pioneering works. This saga was earlier considered as a model example of meticulous chronicling of reliable oral tradition, but is now looked upon as a historical novel by a talented author from ca 1300.

Sveinsson issued "Njala" in 1933 in accordance with the same principles, and amplifies his view of the two schools of thought in the above-mentioned publications from 1958 and in KLNM VII.

Even though the Icelandic School has acquired many adherents, it was criticized, for example, by Halvard Lie (1939, pp. 97–138), where he attacks the methodology and, in particular, the Icelanders' urge to find an author of the anonymous sagas.

The reason why this question is difficult is that the major part of these sagas' contents cannot be controlled, as apart from some poems and ditties there are no available contemporary sources.

Obviously the sagas contain much that is not historical. They provide no absolutely truthful narration, and many unreliable features can have crept in as early as in the contemporary tradition.

For various reasons a modern historian will tend to repudiate Isls as historical records. One is usually suspicious of a long oral tradition, and the narrative is more suggestive of fictional art than of the chronic-ler's meticulousness. Finally, these sagas are concerned to a minor degree with history as it is interpreted today.

"Since Weibull published his "Kritiska undersökningar i Nordens historia omkring år 1000" a complete re-evaluation of the early medieval Nordic historiography and literary history has taken place. With respect to the Icelandic sagas the new point of view has caused one to disregard the prose texts as far as possible when the sagas describe conditions and events in the Viking Age; instead, attention is concentrated upon the stanzas of the earlier scaldic poets, for presumably the prose literature becomes modified through lengthy oral tradition, whereas poems, as a result of their strict metrical and elaborate construction and alliteration, etc., are believed to have survived in an uncorrupted state". 53

Historical criticism has necessarily brought about a critical attitude toward Isls as historical sources. Sveinsson's objection to this is that several historians seem to have been more skeptical towards Isls than towards constructions of later times.

"The pioneer in the field of saga criticism was the philologist C. A. E. Jessen, who in his thesis of 1862 and in a paper on "Egils saga" in 1872 challenged the reliability of the Norse literature."

These papers left their traces. "Criticism gradually took on a more fundamental character, and in 1909 A. Bugge (1909, pp. 433–54) was the first scholar to favor the scaldic poems over the sagas as historical sources. The new evaluation met with opposition, but can now be said to be generally accepted by historians". But in this investigation, which only has the saga texts to rely upon, the problem is almost endlessly difficult and enigmatic, for these texts are almost without poetry. Here one must adopt entirely different points of view than towards the earliest Icelandic prose literature, that can be attributed to the "froði" men. As far as Iceland's and in particular Greenland's own history are concerned, this has not yet happened. Even the most recent treatments of the early history of the two islands are based to a large extent on unconscious

<sup>53</sup> This and the following quotations are from O. Olsen op. cit., p. 19 et seq.

and improvable information which the authors have derived from the sagas without taking the necessary reservations in regard to the value of the sagas.<sup>54</sup>

Apparently the earliest sagas were composed so long ago that they can be considered as belonging to a phase of sheer entertainment, and yet at a time when one still was in close touch with the "froði" men. Only in the most extreme cases it is possible to prove that a saga in its early form escaped adaptation at a later date; in any case, this does not apply to the sagas that will be analyzed here.

S. Nordal (1957, pp. 25–35) has tried to prove that there are clear historical elements in some of the most important Isls. He points out that as a rule lengthy genealogies of superfluous persons, tiresome lawsuits, and so forth, which are insignificant as the tale itself is concerned, are included, and that these can only stem, in part, from early and credible sources, e.g., from the "froði" men and especially from "Landnámabók; the purpose was to give the narrative a touch of historical truth.

But Sveinsson calls attention to the danger of forgetfulness and distortion; fabrication and bias undoubtedly existed in regard to certain families. This applies to an even greater extent to everything that was preserved in narrative form. In particular the use of these traditions for entertainment purposes had to be misgiven from an historical point of view; as always this resulted in regard to oral narrations a stylization of events and characters, but could also bring with it conscious re-writing or additions. It is rarely possible to prove this, but probability speaks in its favor.

Even topography is a field in which the saga has a very firm foothold. There can be mistakes in descriptions of places with which the author is not sufficiently familiar. This particularly applies to localities outside of Iceland. But to go so far as to say — as Nordal does — that all place names are correct must be characterized as gross disingenuousness, an assumption, as it were, that because the author is familiar with the place names he has to make extra use of them. Nordal's conclusions must also be called mistaken when he maintains that changes in social and material conditions, in households, clothing, weapons and seamanship, etc., were not especially notable in the course of the 10–13th centuries. Archaeological evidence has made it clear that several changes of this nature did take place, and it has been proved, i.a., that for example the

<sup>&</sup>lt;sup>54</sup> With respect to Greenland, see the introduction. — Jón Jóhannesson, 1956, "Íslendingasaga" pp. 121—28 deals with Greenland's first centuries. It is written in the old uncritical style, which also applies to Icelandic history in the same period. — The methodological comments are based on O. Olsen op. cit.

saga folk appear in 12th and 13th century clothing and with arms from this time.<sup>55</sup>

It is also incredible that Nordal can maintain that because the authors were confident about the time interval and that they possessed a considerable sense of history obvious anachronisms are rare.

That Isls were considered to be history of one kind or another is evident from the use that authors who must be designated as historiographers made of them -cp. Sturla Porđarson (1214–84) who in his "Islendinga saga" seeks the truth to a greater extent than anyone else does. In his "Landnámabók" he includes excerpts of numerous Isls; that is to say, he did not look upon them as fiction.

According to Nordal they were supposedly aware that they lived in a time of change in religion, morals and politics. Yet it gradually became inevitable that the Christian view of life took the upper hand and exaggerated the harshness and scrupulousness of their pagan forefathers.

Difficult though it is to go along with Nordal's opinion that it is easy to point out what positive efforts the authors made to show that the saga was credible, one must absolutely agree with his belief that it is significantly more difficult to explain what restrictions they placed upon themselves.

Although Isls is predominantly soberly realistic, it contains some striking exceptions, namely in the significance attributed to supernatural forces — witches, spirits, ghosts, and the like, contrasts of character and appearance, epic (magic) numeral three similar to those found in all folklore (Helgason, 1934, p. 121 et seq.).

Furthermore, it was commonly assumed that men of earlier generations were stronger and braver than those of later ones; yet in the good sagas their powers are kept within reasonable limits, even though there is a pronounced tendency toward exaggeration as soon as the events in question take place outside of Iceland, e.g., in Greenland.

Here it may be proper to point out that the art of writing sagas deteriorated very rapidly when one began to ignore to a far greater extent the critical attitude toward the historical element in the sagas that was more or less prevalent at an early stage.

<sup>55</sup> In his epoch making article in NHT, Series 5, Vol. II 1914, Κοπτ developed the following theory with respect to the study of Norway's early history, which he endeavored to substantiate through analyses of "Sverri's saga" and "Heimskringla": whether it was not just as reasonable to believe that the saga authors transferred their period's mode of thinking, both political, social, and clerical, to the past centuries. And he rejected the authors' alleged objectivity as pure and simple postulations – on the contrary they are exponents of very definite opinions both in regard to the past and the present.

At a very early point it was brought out that the dialogues and the narrations in the sagas were unreliable, in other words, sheer fabrications and fiction. Lucidity is characteristic of the sagas; therefore there are dialogues, indirect speeches, and localizing.

Finally, it should be mentioned that there is a possibility of hagiographical influences, edification in preference to the historical truth.

All this brought the saga into the field of fiction.

Modern historical research is concerned with problems that are completely different from tradition and saga. The way in which this literary genre depicts man and gives epic descriptions of events which often had taken place two to three centuries earlier does not penetrate the primary factors that are decisive to the course of development.

The value of the sagas as sources must therefore be calculated on the basis of three facts:

- 1) At least 200 years passed between the actual events and the first recording. In the course of time the narratives were not only subjected to adaption through oral repetitions, but much of the material surely was handled by the "froði" men, and these, with their genealogical, chronological, and topographical studies supplemented the incomplete survivals with materials from other sources and by fabrication.
- 2) The survival took place in Iceland not only subsequent to the year 1200, but also earlier. It has an implicent significant limitation, and one cannot count upon the saga's representativeness with respect to events in Greenland.
- 3) That the earliest traceable version is a saga must be considered significant.

The sagas — and in this connection Isls — are no longer "sacred documents". They have retained their artistic worth, but have lost much of their historical credibility. At present nobody should accept them as original sources — on the contrary, one must view them as representing authorship of a later period.

Since written sources are scarce, when one wants to find source materials other than those the sagas provide, one must, with respect to the Viking Age and the early history of the Middle Ages, seek new ideas and material, for example in the field of archaeology.

But before embarking on this and the two Isls on Greenland, I wish to refer to the appendix on Ldn. (See pp. 135–38).

## CHAPTER VI

## Eiriks saga Rauða and Groenlendinga saga

EsR is extant in two parchment manuscripts: AM 544 and AM 577. The former is a part of "Hauksbók" and can primarily be dated and determined on the basis of a genealogy that was added when the saga was recorded in "Hauksbók". Haukr undoubtedly made this addition himself; as scholars are in general agreement, this can be dated as having taken place in the period 1330–34.

The other manuscript also is extant in a collection of manuscripts entitled "Skálholtbók". Called so, because this book was considered as having belonged to Skálholt Cathedral. K. Kålund (1889, p. 709) dates it to the 1400's, and F. Jónsson ("Gunnlaugs saga Ormstunga", p. IV) dates it to the same century, most likely to the early part of the century.

AM 577 clings to its source far more slavishly than AM 544, and despite several mistakes in spelling it gives a better reproduction of the original. Hauk and his two secretaries re-worked AM 544 stylistically. S. B. F. Jansson (1945) convincingly clarified this situation, thereby ending all discussion about which of the texts are suitable from a methodological point of view. Much earlier, however, it had become obvious that the two texts reproduce the original one (ibidem pp. 21–31 and p. 82).

Since the two sagas are named differently in the two manuscripts, they are called in the numerous editions EsR and "Porfinns saga Karlefnis", respectively. In AM 577 the saga is named after Eirik Rauða and doubtless this was its original title.

There also has been some profound disagreement in regard to the place where the saga was composed. There have been many suggestions; some of the most remarkable ones will be mentioned here (Jansson, 1945, pp. 263–72). G. Vigfusson suggested Vestlandet. G. Storm: Snæfellsnes. F. Jónsson: Vestlandet in the Breiðafjord areas. M. Þorðarson in 1929: Snæfellsnes; in 1935: Nordlandet, and opposes Storm's and F. Jónsson's views. H. Hermannson (1936, Vol. XXV p. 28): Þykkvibærjarklaustr in Skaptafells sysla on the South Coast of Iceland. S. B. F. Jansson: In chap. III Snæfellsnes is the center of events; according to

him, the author is without doubt familiar with the region. In comparing this saga with "Eyrbyggja saga" he concludes that there is a common stylistic peculiarity of dialect. He presumes that this is a strong indication that both EsR and "Eyrbyggja" were written at Snæfellsnes, the starting point of the colonization of Greenland.

The other great saga concerning the early settlement of Greenland is "Groenlendinga saga" (Gs), which has only survived as an interpolation in "Ólafs saga Tryggvasonar hinn mikla" in "Flateyjarbók" (Fltb), *i.e.*, in chapters 340–42, the last part of 352, and 427–33.

Fltb is a composite manuscript that was composed in the late 1380's<sup>56</sup> by two priests, Jón Þorðarson and Magnus Þórhallsson; the latter also illustrated the entire work, which has been preserved in the original; furthermore, his introduction gives an explanation of the book's contents and the two authors' contributions to it.

The sagas of Olav Tryggvason and Olav den Hellige (the Saint) give a particularly strong impression of being a compiled work. They were recorded by Jón Þorðarson, who had a considerable number of manuscripts at his disposal; it is believed that they belonged to the monastery in Pingeyrar. It is maintained that they were edited rather mechanically; there is no question of any re-working of the material, but simply a dovetailing of the texts (Jónsson, 1927, p. 139–150). As will be seen below, I am not in full agreement with this.

Ever since Torfæus brought Fltb to Denmark in 1662, the comparative virtues of Gs and EsR have been a subject of heated discussion. Until 1887, when Storm (1887) published his critical investigation of the source material, Gs was preferred. But Storm arrived at the conclusion that Gs should be treated with the utmost care; he felt that everything that solely was known from Gs should be rejected on the grounds of unreliability, and that anything that did not agree with the earlier tradition that he found in EsR was not historical.

Following this authority's judgment EsR became the sole authentic source – often on the basis of the text in "Hauksbók"<sup>57</sup>. F. Jónsson<sup>58</sup>. agreed with Storm, also in regard to the question whether Gs depends upon a Nordlandic (the Skagfjord area) tradition which had become "faded, distorted and embellished".

- <sup>56</sup> Annalnotes were added later, concluding in 1394.
- <sup>57</sup> Even subsequent to Jansson's results in 1945, one is not amenable to these in this country, cp., e.g., J. Meldgaard (1965) which bases his presentation on Hauk's revised version.
- <sup>58</sup> In NHT 1912. ÅNOH 1915, and Litt. Hist. Vol. II 1923, p. 772. In 1891 G. Storm published "Eiriks saga Rauða". On p. XV he considers it probable that J. porðarson, who was alderman in Reynistad's convent in 1383 (see below) most likely found Gs in the convent's library.

It should be sufficient at this point only to mention a few of the many different opinions.

A. W. Brøgger (1937) defended Gs, but did not try to solve the problem of the two traditions that supposedly developed independently of one another in Iceland.

For a long time there was mild opposition to Storm's opinion. M. ÞORÐARSON and H. HERMANNSSON disagreed only with respect to insignificant points, <sup>59</sup> but the latter put forth a new theory. He assumes that both sagas have the same origin, since Gs refers to Karlsefni as an informant; the tradition is, however, better preserved in EsR.

The rehabilitation of Gs was initiated by S. Nordal (1953, pp. 246–48): "There do not seem to be any particular reasons for regarding the last as much earlier and less reliable than the first". In addition, he believes that they could have been composed almost simultaneously, each simply follows its own tradition — and, in spite of certain unreasonable details — Gs may very well be the one that reproduces the earlier and more true tradition.

The climax presumably was reached with the issuance of J. Jóhan-NESSON'S dissertation in 1962. According to him, the dating of Gs cannot be determined on the basis of the saga's connection with "Landnámabók (S)", and there was no indication that other sources were used in the composition of Gs, as was the case in regard to EsR. He agreed with NORDAL, but went even further, for he maintained that Gs is earlier than EsR, and that the latter is based upon Gs, but diverges from it because EsR uses other sources, in particular Gunnlaug's "Ólafs saga Tryggvasonar" from ca 1200; today this saga, which supposedly invented the story of Leif's mission in Greenland carried into effect by Olav Tryggvason, is only known from other sagas (ibidem p. 62 et seq.). This compared with the geneaologies contained in the two sagas, where Gs mentions "Brandr byskup" as a descendant of Gudrid and Karlsefni, EsR refers to "Brandr byskup hin fyrri", in order to avoid confusing him with Brandr Jónsson at Hólar (1263-64), - this brings Jóhannesson to the conclusion that Gs is earlier than Gunnlaugs "Ólafs saga". More probably it was written in Bishop Brandr Sæmunðarson's period (1163-1201), whereas EsR must have been composed after 1263, which should also stem with the author's having made use of S. Jóhannesson's theories have gained considerable support, and interest has again been focused on Gs's information. As I shall try to explain below, however, in my opinion he did not produce parts of his evidence without a measure of coersion. For, if one concentrates on the similarities between the two sagas instead of, as scholars have done to date, limiting oneself to their differences, one

 $<sup>^{59}</sup>$  Respectively, in "Islenzk Fornrit" Vol. 4, 1934. Introduction to the two sagas and in "The Problem of Wineland".

arrives at a common material which, for example, comprises the prophecy concerning Gudrid's descendants and the final chapter that deals with the bishops who descended from her, therefore containing the fulfillment of the prophecy. These things are two decisive components of an Isls, and to judge from the list of bishops one ventures to maintain that a saga (x) from 1200 is the common source of Gs and EsR. No doubt Jóhannesson is correct in maintaining that in many respects Gs has the earliest survival, that is to say, it gives the best reproduction of the common source. But to identify it with the source of EsR on this basis conflicts with all methodological principles. I am inclined to maintain that there probably are a number of lost and unknown links and revisions between x and the extant sagas.

An account of the things that are common to the contents of the two sagas will be given below; this will also permit the inclusion of the text that concerns the voyages to Vinland. The available material will never be capable of supporting an attempt to reconstruct the source of the sagas on the basis of Gs's survival. <sup>60</sup> But first I would like to comment on my views concerning Gs.

Since Gs is preserved in Fltb, it should be pointed out that it was not transcribed as a continuous saga. Indeed, on the basis of the available material, I am even convinced that there may be some doubt whether the various parts are, on the whole, components of one and the same saga, as many historians have claimed, <sup>61</sup> which explains why it was called "Groenlendinga saga" when it was issued.

Magnus Pórhallson who, as mentioned above, was responsible for the illustrations and also the titles of the individual chapters, does not share this interpretation: chap. 340 is entitled "pattr Eiriks rauða"; this also applies to chapters 341 and 342. Chap. 341 and the final part of chap. 352 in their present form must, however, be considered loans from "Heimskringla" (see below).

An independent narrative actually starts with chap. 342 which concerns Herjolf and his son, Bjarni. It is not really impressive as a continuation of chap. 340, for it repeats things that had just been reported, for example, that Eirik lived at Brattahlid, and so forth.

Chap. 427 is entitled "Hér hefr Groenlendinga patt." There is a connection between chapters 342 and 427, for both deal with BJARNI HERJOLFSSON, but there is no smooth transition to chap. 427, which tells

<sup>60</sup> My textual basis' for EsR is the edition that is contained in Jansson's dissertation of 1945. In regard to Gs, "Islenzk Fornrit" 4. 1935, which also includes EsR and the 1945 edition of Fltb, Vols. I and II, is the source from which I have taken the original division of the chapters.

<sup>&</sup>lt;sup>61</sup> For example, M. pordarson op. cit., p. 241 et seq., and, most recently, Gwyn Jones, 1964, p. 143 et seq., and Hans Bekker-Nielsen in K. Krogh, 1967, p. 143 et seq.

about his stay with Eirik the Earl, and thereafter about Leif's voyage to Vinland. I cannot explain why the narrative is not continuous; it is up to the philologists to solve this problem. But curiously enough, the events in chap. 427 et seq. take place after Olav Trygvasson's death, cf. Bjarni's stay with Eirik the Earl, etc.; these reports nevertheless are compiled into Olav's saga.

These things substantiate the theory that not only one, but two independent narratives about Greenland and Vinland, in addition to loans from "Heimskringla", are compiled into "Ólafs saga Tryggvasonar".

The general designation Gs must accordingly be considered incorrect. And now we come to the likeness of the sagas.

Chap. 340 is mainly identical with chap. 2 in EsR. The same chapter appears in S (Ldn, 1900, pp. 155-56; H. Hermannsson, 1936, p. 9; There is no reason to suppose that the chapters derive from S, the similarity regardless) - with which, apart from a limited number of divergences, there are verbal correspondences. Yet EsR only includes chap. 89 in S-Gs on the other hand also includes chap. 90-92; chap. 91 is elaborated in the beginning of chap. 342. All of them place "Eiriksey nær miðri inni vestri bygð". This is the only place where the name "Eiriksey" is memtioned. Because of the great confidence that scholars always have had in regard to these texts, considerable significance was attributed to this place. Nevertheless, there was no hesitancy about moving "Eiriksey" down to "eystri bygo," as only H mentions. In my opinion, these reports are worthless, and if one compares them to Ivar Bardarson's accounts, none of the numerous transcripts mentions an "Eiriksey" in the Western Settlement or in the Eastern Settlement, but refer, instead, to a Henø or Herey (the Hare Island) in the Eastern Settlement.<sup>62</sup> F. Jónsson rejects both place names, even though several of the transcripts were made independently of one another, and he believes that the abovementioned placing of Eiriksev in the Eastern Settlement is identical with Henø, or, more probably, Herey, which supposedly was a result of faulty copying.

It is extremely likely that in common with other place names (see below) Eiriksey was constructed at a later date.

The Gs version is boiled down as far as Eirik's achievements in Greenland are concerned; this apparently was deliberated, perhaps by Jón Þorðarson, for there is a reference to "sem segir i sogu Eiriks," *i.e.*, more can be found out there.

<sup>62</sup> Í. BARDARSON, 1930, p. 27 and p. 30. It is believed to have been transcribed about 1370. Unfortunately, it is only extant in 15th Century transcripts and in transcripts of later date. Nonetheless considerable significance is attached to it, for it goes back to an informant who spent about 20 years in Greenland. (See below). F. Jónsson's publication and his interpretation should, however, be re-evaluated. His reasoning: Herey = Eiriksey is not justifiable.

I am unable to determine whether this "Eiriks sogu" is identical with the source of Gs, but the Fltb version probably is based on the same textual source as S – or, perhaps as far as the chapters in question are concerned – directly upon this. For these are the only ones in which it is written (Ldn 1900, p. 156 and "Íslenzk Fornrit" 4, pp. 242–43): Sva segja froðir menn, at á þvi sama sumri, er Eirikr rauði fór at byggja Groenland, þa fór halfr þriði togr skipa or Breiðafirði ok Borgarfirði, en fjortan komusk út þangat. Sum rak aftr, en sum tyndust. Þat var fimmtan vetrum fyrr en kristni var logtekni á Islandi." Ldn in H (chap. 78) relates (Ldn 1900 p. 35): Sva segir Ari Þorgilsson, etc. . . .

There must be some connection between x and S, for the latter also mentions BJARNI HERJOLFSSON'S vovage to Greenland, but ignores his discovery of the new lands. To date it has been a fact (B. M. Olsen, 1893, p. 301 et seq. supported by Jansson op. cit. p. 83) that the saga borrows from Ldn, and not the other way around. But, as mentioned above, the opposite can also be the case, and from all indications, Sturla's knowledge of x derived from "Styrmisbók"s (?); Thus, like EsR, Gs must have preferred S's version. As far as Gs is concerned, I feel that this supports my theory, not only by virtue of the clear verbal agreement, but also because Gs amplifies the above-mentioned quotation with a sentence that can solely derive from "Kristni saga": A bvi sama sumri fóri útan Friðrekr byskup ok Þorvaldr Koðransson. "Kristni saga" is believed to have been written by Sturla Pordarson as a continuation of his Ldn (KLNM Vol. IX, col. 356, supported by Nordal, 1953, p. 227). Accordingly, this confirms my earlier assumption that Gs must consist of at least two independent narratives; and perhaps Magnus Pórhallson did not head his chapters quite so casually.63 Here we also have the explanation why we twice learn where Eirik lived, to whom he was married, who their children were, and what they were called.

Jón Dordarsson may have been responsible for this loan from "Kristni saga"; accordingly, the transcript does not appear to be as mechanical as has been maintained. On the contrary, he seems to compile most confidently; moreover, in this case his relative dating even is doubly relative and he displays some independence in cutting the text, so that events that are not directly connected with the course of events are eliminated and replaced by a reference. Other examples of his eventually independent behavior will be given below.

It is difficult to understand why both Gs and EsR failed to include the chapter on "Porkell Farsekr", Eirik's kinsman in Hvalsey fjord which is included in S, chap. 93. I cannot find an explanation;

<sup>&</sup>lt;sup>63</sup> Thus, Storm, 1891 p. XV – I must, however, point out that the title "Groenlendinga pattr" is also used for the narrative about Einar Sokkasson. See "Islenzk Fornrit" 4, p. 271 and Fltb, pp. 231–41. In connection with this pattr there is a list of bishops and churches for Greenland.

an extremely poor one is to assume that the entry about this is not directly connected with the action in the two sagas.

S. F. B. Jansson concluded that S's text was not interpolated here in the first chapters of EsR in any mechanical or artificial way, but, instead, in the original author's way (op. cit. pp. 82–91). (EsR's first chapter is exclusively concerned with Icelandic matters and will not be discussed here; its source, like that of chap. 2, is S).

For the sake of clarity I shall, in this connection, call attention to the constructions and the additions in these common chapters; as far as the rest is concerned, the two sagas will be treated separately below.

The sentence in both sagas:  $Han \ kalla\eth i \ land \ pat \ er \ hann \ hafði fundit Groenland pvi at han kvað pat <math>mj_Qk$  etc. fully conforms with the same in Islb (see above).

The only entry concerning the first landnam in Greenland and the fjords where they settled is only found in Gs and in S chap. 90. In my opinion it is doubtful that this information is original. More probably it can be attributed to a later, "perspicacious" construction based on place names, for apart from Helge Dorbrandsson none of them has a patronymic — one is called Dorbjorn Glora. Helge is moreover connected with Alptafjord — the same fjord where his father lived in Iceland (Ldn, 1958, p. 21, p. 42 and p. 47). İvar Bardarson (1930) mentions no fjord called this, but one is included in the Icelandic fjord lists; these, however, also include all the above-mentioned fjords that have masculine names, wherefore I have not the slightest doubt that the fjord list borrowed from Ldn.

I also want to question very seriously the authenticity of the description of Eirik Rauða's three-year voyage of discovery in Greenland; this has been called the first reconnaissance, and accounts about it have always been considered highly significant. 66 But here we doubtless also are faced with a very free reconstruction based on more recent tradition. This is alone confirmed by the comment that he, for example during the second summer in Greenland fór i ina vestri óbyggð ok gaf viða ornefni. We are not told what the places are named, and it seems odd that only "óbyggð" is used, since at that period all of Greenland was, after all, "óbyggð".

- $^{64}\ \mathrm{H}$  and "Eyrbyggja saga" chap. 48 calls him Snorri þorbrandsson in another connection.
- 65 MoG. 20, p.273 and Í. Barðarson, p. 55 et seq. It concerns transcripts of Björn Jónsson of Skarðsa and Arngrimur Jónsson the latter is no more in the original. F. Jónsson attributed great geographical and topographical significance to these lists, but here I cannot agree with him.
- "Alpta" i.e. a swan this bird did live in Greenland in the Middle Ages, cf. M. Degerbøl in MoG. 88,3 p. 41.
- <sup>66</sup> Most recently by F. Gad, 1967, p. 38 et seq., and earlier by F. Jónsson and P. Nørlund.

Another dubious entry is that Eirik from "Eirikshólmum við Hvarfsgnipu", i.e. Kap Farvel – fór allt norðr til Snæfells ok inn i Hrafnsfjorð. Þa kvazk hann kominn fyrir botn Eiriks fjarðar etc.". In view of the topographical investigations <sup>67</sup> that have taken place, this does not make sense, for "Hrafnsfjorð" supposedly was located in the southernmost part of the Eastern Settlement, Eiriksfjord in about its middle part, wherefore the expression "allt norðr" seems completely meaningless. It is impossible to identify "Snæfell" accurately.

The dating of Eirik's final landnam is relative in both sagas. In EsR it is very uncertain, for it relates that Eirik departed in the summer that he and Torgest fought in the spring!

As mentioned above, the dating in Gs is double, since one date derives from "Kristni saga" whereas the other says "pat var fimmtán vetrum fyrr en kristni var logtekin á Islandi", which without doubt can be traced to Islb via S. Yet here the author has chosen from the latter's "xiiii vetrum eða xv".

Eirik's stay in Iceland and his colonisation of Greenland can thus be traced to the same original version.

And now for the likenesses between the two sagas.

EIRIK is married to TJODHILDE. Their children are LEIF, TORSTEIN, THORVALD, and FREYDIS (the latter is illegitimate in EsR, however). All of them are the main persons in the voyages to Vinland.

Brattahlid is the point from which the voyages to Vinland depart. New lands are discovered there, and are given the following place names: Helluland, Markland, Vinland, and a locality: Kjalarnes.

EIRIK is urged to go along on the voyage to Vinland, because he is lucky.

EIRIK falls off his horse while en route to the ship.

Leif goes off to Vinland; he meets no Skrællings there.

One finds grapes, and loads the ships with grapes and, among other things, "mazurr". The grapes are harvested either in winter or in spring, when there cannot be any grape harvest. The Norsemen do not discover any grapes themselves.

Leff saves the victims of shipwrecks, and is called lucky.

The prophecy about Gudrid and her descendants.

GUDRID marries Torstein.

Torstein's unsuccessful voyage.

He dies in the Western Settlement.

The farmer in the Western Settlement is also named Torstein, and his wife dies before Torstein Eiriksson dies.

<sup>67</sup> For example, F. Jónsson 1899, p. 273 and C. L. Vebæk 1966, pp. 198–212, first and foremost on the basis of Ívar Bardarson. But none of them was surprised by the 3-year voyage of discovery.

After his death Torstein Eiriksson talks to Gudrid.

He is buried beside the church at Brattahlid.

The chapter about Karlsefni starts immediately after the tale about Torstein and Gudrid, and begins with a geneaology of his family in agreement with Ldn, and also comments that he was wealthy.

There is a great deal of talk about Vinland as a prelude to Karlsefnis's and Gudrid's journey to this place.

During Karlsefnis's voyage a whale drives ashore, and they use it for food.

The Skrællings become afraid of Karlsefnis's bull, which bellows while trading goes on.

The Skrællings want to buy weapons, but Karlsefni forbids this. Snorri is born in Vinland.

Karlsefni leaves Vinland for good, because of the strife with the Skrællings, and return to Brattahlid.

Additional material about the Skrællings:

The Skrællings run away from their skins when they come to trade, but for different reasons as given in the two sagas.

A Skrælling lays hands on an axe.

One fights with the Skrællings.

THORVALD is buried in the newly-discovered land.

FREYDIS marries a certain Torvard.

There is dissension among the participants in the voyage in which FREYDIS takes part. The saga ends with the settlement of GUDRID and KARLSEFNI in Iceland, where, according to Gs they settle: on Glaumbæjarland in Skagafjord; EsR: Reynines (= Staðr in the 13th Century) which is located ca 10 km northwest of Glaumbæjarland. 68

Finally, special mention is made of the three bishops who descended from them.

The following minor dissimilarities can be mentioned:

In Gs Thorvald is killed by a Skrælling, in EsR by a monopode. Gs: 60 men and 5 women – EsR: 160 men leave for Vinland with Karlsefni.

Possibly the name Bjarni Herjolfsson in Gs is identical with Bjarni Grimolfsson in EsR.

Gs has 5 journeys to Vinland, EsR only 2.

G. Jones 69 maintains that both sagas contain original materials, which the above admittedly confirms to a high degree. But in this connec-

<sup>&</sup>lt;sup>68</sup> Storm 1891 p. 27 et seq. Glaumbær cannot be seen as having belonged to Karlsefnis's descendants, which on the contrary was true of Reynines (Staðr) until 1259. After the farm became a convent, it was called, from the 14th Century, Reynistaðr. (See, respectively, "Sturlunga" and "Byskupa sögur".

<sup>69</sup> op. cit., p. 83. Refused by Bjørn porsteinsson in Sagabook XVI, p. 185.

tion it should be noted that certain information that is not common to the two sagas can nevertheless be presumed to go back to the lost original, which can only be proved in very few cases, e.g., that concerning BJARNI HERJOLFSSON'S discovery of the new lands.

# Information that must be viewed with certainty as having been inserted in EsR

Skalhóltbók's EsR's source must have been composed between 1263 and the time when H's version was chronicled.

The origin of chapters I and II is demonstrated above. Chap. III, which narrates about Torbjorn's and Gudrid's experiences in Iceland is limited geographically to the southwestern coast of Snefællsnes, with several place names from there. On the other hand only a little geographical information is given about other Icelanders from other parts of the land, such as, for example, Bjarni and Torhall, as well as concerning Karlsefni's new place of residence (Storm, 1891, p. XI–XII). It can be taken for granted that the author drew upon his knowledge of local conditions in preparing his narrative about Torbjorn and Gudrid.

In addition to the written sources that have already been mentioned, EsR shows that the author possessed literary geographical knowledge which is expressed, for example, in his understanding of the grouping of the lands, the Scots Haka and Hækja, and in his reports on the origin of the two Skrællings. To Besides he has zoological insight, cf., the animals in Vinland. These phenomena, together with the clear framework of the saga, have contributed to it's being considered at an earlier date as more reliable from a historical point of view.

An excellent example of the author's method can be seen in the chapter concerning Karlsefnis's bartering with the Skrællings. His people give colored cloth in payment for skins! There may be a question of a loan from the Norsemen's trade with the Lapps, for it must be considered doubtful that trading goods were deliberately brought along on the expedition (Porsteinsson, 1963, op. cit., p. 184).

EsR is very precise in its description and in its establishment of the new lands from north to south in relation to one another; for example, it says that the shortest distance to the new regions is from Bjarney. In addition there are names which do not exist in Gs, e.g., Hóp and Straumfjorð in Vinland. More probably these should be placed in the Western Settlement. (Í. BARÐARSON, 1930, p. 66 et seq.).

In S. B. F. Jansson's view the anecdote about Porbjörg Litillvölva

<sup>70</sup> Stressed by J. Jóhannesson *in* Sagabook op. cit. and discussed in further detail by Þorsteinsson (1963–64). Like Jóhannesson, he believes that EsR uses Gs as its source!

is one of the author's own interpolations (KLMN III col. 537). In my opinion this imputation also applies to the narrative about Porhall Veidemader, which is clumsily placed just before and just after the episode with the Skrællings.

As far as Eirik's role with respect to the Vinland voyages is concerned, S. B. F. Jansson (1945, p. 130 et seq.) believes that the account in Gs regarding Eirik's downfall and retreat obviously conforms to a far higher degree to Old Norse superstition.

As mentioned above, I can accept J. Jóhannesson's explanation, namely, that the chapters concerning Leif Eriksson's stay in Norway and his subsequent missionary activities must be founded upon that tradition that is created in Gunnlaug's "Ólafs saga Tryggvasonar". Leif is thereby given prominence at the cost of Bjarni Herjolfson, and the latter, who may even have been a heathen, becomes completely superfluous as far the saga's action is concerned. In this connection it should be pointed out that the description of Leif's Vinland voyage is far more detailed in Gs than is the case in EsR.

The information about Leif's stay with Olaf Tryggvason does not, as in Gs, appear to have been taken from "Heimskringla" (see below), but on the contrary there is a striking likeness to "Kristni saga" chap. 12 (H, 1892–96 p. 142): Þa sendi hann (Olaf Tryggvason) ok Leif Eiriksson til Groenalandz at boða þar tru. Þa fann Leifr Vinland hit goða. hann fann ok menn á skipflaki i hafi. Þvi var hann kallaðr Leifr hinn heppni.

Prior to this there is an anecdote about Leif's achievements on Suðereyjar. Scholars are in no doubt whatsoever that there is a question of an insert here. The argument concerns the question of whether it belongs to the later legendary saga style or the early historical tradition, or whether it was influenced by a similar tale in "Eyrbyggja saga" about Froda's miracles. A certain connection between "Eyrbyggja saga" and EsR is apparent in the account of Snorri Torbrandsson's downfall in Vinland (Islenzk Fornrit, 1935, p. 135 chap. 48). Accordingly, the author of EsR cannot have been entirely unfamiliar with this saga.

Now that it is evident that the account of Leif's and Olav Trygg-vason's missionary work is rooted in a tradition that was created ca 1200, it is natural to take a skeptical attitude toward the rest of the information resulting from the mission as described, namely, the building "Tjodhilde's church". The saga says en þjoðhildr gekk skjótt under (was converted to Christianity) ok lét gera kirkju eigi allnær húsunum. Þat hús var kallat þjoðhildarkirkja. Hafdi hon þar fram boenar sinar ok þeir menn sem við kristni tóku.

<sup>&</sup>lt;sup>71</sup> H. Hermansson *op. cit.* pp. 14-15. "Eyrbyggja saga" is dated by O. E. Svensson *op. cit.* to between 1200 and 1222.

Now it is quite true that in 1961 a little church was excavated at Brattahlid, planned according to a type that otherwise is only known in secular sites, and disappears in the rest of the North in the course of the eleventh Century A.D. (Krogh, 1965 and 1967, p. 19 et seg.). At first glance this church ruin seems to confirm the saga's statement: "eigi allnær húsunum", for it is located high up on a raised beach ca 200 m distant from the later church (churches) and churchvard. This early church is a reality. But in relation to the above remarks concerning the introduction of Christianity, it is by no means inconceivable that this is the church site that subsequently created the tradition concerning "Tjodhilde's church" building activity. In my opinion this hypothesis is very convincing, for it is extremely doubtful that Christianity was introduced to Greenland at the same time as in Iceland. Cp. HN's information on the subject: it must have taken place at some time after the year 1000. Under all circumstances, it is very unjustifiable to attempt to place this church chronologically on the basis of an extremely dubious saga's accounts that were composed in Iceland more than 250 years after the event took place.72

In the chapter concerning Torstein's tragic end in the Western Settlement it is said that after the introduction of Christianity to Greenland it had been customary to bury the dead in unconsecrated ground. Therefore a stave was put into the breast of the corpse, and later, when the priest arrived, the stave was drawn out and holy water was poured into the hollow and songs were sung for the dead, even though this may have happened a good deal after the demise.

I am skeptical about the description of this custom which, according to the saga's own chronology, supposedly was practised in Greenland immediately after the year 1000.

No legal material whatsoever has been preserved concerning Greenland. Weak evidence of an independent Greenlandic law appears in the 12th Century – but there is no knowledge of any Christian Law. Consequently, it will be rational to investigate whether there are any parallels of the above-mentioned custom in the rest of the North. It is mentioned with striking verbal agreement in the earlier "Gulatingslovis kristenret" which was composed about 1150. Chap. 23 states, i.a.: En ef prestr er eigi heima þa scal þo lic niðr setia en þa er prestr kemr heim þa scal staura niðr a kistu oc steypa helgu vatne i. En hann scal syngia ivir liksong.<sup>73</sup>

 $<sup>^{72}</sup>$  ''Tjodhilde's church'' will be brought up again in the chapter that deals with archaeological materials.

 $<sup>^{73}</sup>$  "Norges gamle love", Vol. I, Kria, 1846, p. 14. A comparable decision is not to be found in the chapter on the Christian Law in Gragas!

Why the author of EsR transferred this excerpt of a Norwegian Christian Law to his saga must remain unexplained. But as pointed out above, he must have been familiar with Norwegian conditions. And yet it is a gross anachronism to trace the custom as far back as Eirik Rauða's time.<sup>74</sup>

Events which are described with the aid of dialogues must be treated carefully. In those cases in which two participants are involved there can scarcely be any doubt that the conversation is pure and simple fantasy. This accordingly applies to the anecdote about the Christmas brew at Brattahlid. Furthermore, according to Gs Eirik was dead when Karlsefni arrived in Greenland.

The whole course of events concerning Torstein's stay in the Western Settlement is worthless from an historical point of view. There are several fictional features, cp., simply, that the unsympathetic Gardar is the first to be struck by the disease and dies as a result of it.

EsR contains a couple of ballads that are believed to be fully authentic. Although I am naturally not competent to judge this, I nevertheless believe that F. Jónsson's dating of them on the basis of the sagas is very unfortunate.

As I see it, the two verses that are attributed to Porhall Veidemadr<sup>75</sup> must have been composed in another connection, for it is said that one longs to return to the places where one's fellow-countrymen are building, *i.e.*, Greenland, instead of going out in search of new lands, as the accompaning text states.

Here, too, the verse about the monopode is, as mentioned previously, accepted as a reality, even though it is difficult to use the same criteria for this as in regard to the two others, because of the simple prosody. There likewise is a considerable difference between the verse and the prose text, and there is nothing in the former that implies that a monopode has killed anyone; on the contrary, the only remarkable thing about the verse seems to be that it shows that one met and pursued a monopode in Vinland.

- <sup>74</sup> It is quite another matter that this burial custom might very well have been practised in Greenland, needless to say at a later date, considering the influence of the Norwegian church, which came following the establishment of the bishopric in Gardar. Here the episcopal see was occupied by Norwegian clerics throughout the Middle Ages. And in this case it should be possible to find graves at farms that are located far away from churches, which has not yet occurred. This should nevertheless be kept in mind during investigations in remote regions.
- $^{75}$  F. Jónsson: "Den Norsk-Islandske Skjaldedigtning" Vol. I.B, p. 182. He dates it at 1003! With reference to the disagreement between poems and prose, this was proved by H. Hermansson in certain cases  $\it{op.~cit.}$  p. 21.
- $^{76}$  F. Jónsson: op. cit. Vol. I.B. p. 394. Here the composition date is fixed at 1004!

## Construction and Interpolations in Gs

Chap. 340 has been dealt with above in another connection.<sup>77</sup>

There is such a great resemblance between chap. 341 and the end of chap. 352 and "Ólafs saga Tryggvasonar" in "Heimskringla" chap. 86 and 96 (1911, p. 164 and 170) that one dares to assume a direct relationship. But there are three remarkable dissimilarities.

The sentence with which the chapter begins contains a relative dating of Leif's voyage to Norway: bá er sextán vetr váru liðnir fra þvi, er Eirikr inn rauði fór at byggja Grønland, þa fór Leifr, sonr Eiriks, utan af Grønlandi til Noregs etc. Since this is not included in "Heimskringla", Gs's author must have constructed it himself, but with a poor result, for the 16 winters that are added to the year when the colonization began take place after Olav Tryggvason's death!

Chap. 96 in "Heimskringla" includes the sentence: ok pa fann hann (Leif) Vinland it goða. This is omitted in Gs, which may have happened on purpose, because Leif is first to go to Greenland for another reason, namely, after the land was discovered by BJARNI HERJOLFSSON.

Finally, Gs contains an interpolation at the close of chap. 352 which is not included in "Heimskringla": En po af raðum ok áeggjan Leifs var Eirikr skiðr ok allt fólk á Grønlandi. I believe that this statement is attributable to the author's own reasoning based upon the actual conditions or, perhaps more likely, as a result of his otherwise limited knowledge of these conditions. Under all circumstances it is not in agreement with his comment in chap. 429 to the effect that Eirik died as a heathen.

It can scarcely be all too rash to attribute these three dissimilarities to Jón Þorðarson.

Chap. 342. As mentioned above, the introduction is identical with S, but more copious. "Hafgerðingadrápa" is of no particular importance to this investigation, but F. Jónsson's dating of the verse can, like the rest in EsR, be challenged. It does not seem to have any direct connection with Greenland, and is an insertion. (See "Den Norsk-Islandske Skjaldedigtning" Vol. I.B, p. 167).

This chapter is particularly notable because of its constructed numbers and words. BJARNI and his companions sail 3 days – the magical numeral 3, whereupon they drift aimlessly at sea many days. Thereupon, 1 day and the 1st land; 2 days – the 2nd land; 3 days – the 3rd land; 4 days – the 4th land = Greenland. They reach Herjolfsnes with a south-

<sup>&</sup>lt;sup>77</sup> In the following I shall deal as far as possible with Gs chapter by chapter. I purposely adhere to Fltb's division of the work into chapters, in contrast to the version in "Islenzk Fornrit" and the translations of G. Jones *op. cit.* and of B. Bekker-Nielsen *in* Krogh, 1967, which, as mentioned above, consider Gs as a continuous whole.

west wind, which does not comply with the previous account which relates that there was a glacier in the 3rd land – Baffin Land? If that were the case, this land should be situated much farther to the north than Herjolfsnes.

And then it says that BJARNI gave up life at sea and settled down with his father!

I am unable to comprehend why a scholar such as, for example, A. W. Brøgger (1937, p. 58; Gad, 1966, p. 64), could find it possible to describe the narrative about Bjarni's voyage as a kind of ship's log; clearly, the story is artificially constructed.

Chap. 427. The introduction, with Bjarni's stay with Eirik the Earl, must be a constructed transition to Leif's voyage to Vinland, and, as mentioned above, is self-contradictory.

Leif's and Bjarni's voyages are identical; their order is simply reversed. The information about the duration of night and day in Vinland can be based on accounts derived from Bede's *De temporum ratione*. I believe that perhaps to a lesser extent GH, Book 4 chap. 38 concerning Halagland, could have been influential.<sup>78</sup>

The role played by the German, Tyrker, is revealed in chap. 428. He was "invented" for the purpose of telling Leif about the grapes – therefore the anecdote about Tyrker's peculiar behavior. In EsR the Scots Haka and Hækja find the grapes. The chapter ends with a remark that supposedly explains why Thorvald goes off on his expedition to Vinland – moreover, the same one for which Bjarni was made responsible: (ok Porvaldi) potti of oviða kannat hafa verit landit.

Chap. 429. The find of the wooden grainholder must be viewed as a new construction of a fictional nature, whereby the reader is prepared for the final meeting with the persons whose existence is sensed when the grainholder is found.

The magical number 3 is used once more at the first meeting with the Skrællings. 3 rises = 3 skin boats, under which 3 times 3 men lie. Both Kjalarnes and Krossanes are explained etymologically. In regard to the latter, the author is forced to expand his explanation by commenting that Christianity had been introduced to Greenland, but that Eirik had died a heathen. Most probably this statement is based upon a more veracious source than the one mentioned earlier in chap. 342. In chap. 430 Christianity is described as new in Greenland.

Chap. 430. As far as the motive of Torstein's travel plans is con-

<sup>&</sup>lt;sup>78</sup> Suggested in a discussion with Inge Skovgaard-Petersen. Furthermore, Adam obtained the mentioned information elsewhere in Bede. Another matter is that the etymological vin/Vinland (wine/Wineland) must derive from Adam's GH, and later became commonly known in the entire North. But this does not necessarily mean that the author of Gs was familiar with GH.

cerned, namely, to fetch his brother Thorvald's body, I believe that the source can be found in the earliest version of Grágás's Christian law, which was composed between 1122 and 1133, and undoubtedly was written down contemporaneously (KLMN, col. 410 et seq.; Lárusson, 1953, pp. 464–79). Here it states: Ef maþr andazk i út eýiom oc ero þeir menn skyldir at føra lik til kirkio, er a megin lande ætti til at føra . . . . . Sa á skips at lia er beðinn er ef til á. Ef maþr varnar skips eþa farar sa er bøndr er oc verþr hann utlagr um þat iij morkum." (Grágás, vol. I p. 10, 1852). This is the background against which Torstein's eagerness to travel must be viewed. There is no question here of the authors' use of an anachronism. Why, for example, is there no mention of others who leave on the same errand following Torstein's death? The Christian law gives no dispensation whatsoever in this regard. There were many others whose duty it was to bring the body home to the church.

Furthermore, there are several 14th Century interpolations. G. Storm (EsR, 1891, p. XV et seq.) already found the explanation of that part of Torstein's prophecy that predicts that Gudrid will take vows as a nun, and so forth, as well as the confirmation of this in chap. 433. According to him, this is attributable to the existence of a convent in Revnistaðir, which was established in 1295<sup>79</sup>.

In regard to 14th Century characteristics, Storm pointed out still more of them, e.g., the fact that the author presumes that there was a direct connection between Norway and Greenland, and the other way around, as Bjarni's voyages between Greenland and Norway indicate. Karlsefni also comes to Greenland from Norway, and goes down there again with Gudrid. Here he sells his "husanostra" to a German from Bremen for  $^{1}/_{2}$  mark gold - just as was customary in Bergen in the 14th Century.

In this connection it can again be reasonable to assume that Jón Þorðarson is responsible for these interpolations.

But to return to chap. 430. It is stated that one makes coffins for the dead, which must be considered quite unusual, since only a limited number of the burials at "Tjodhilde's church" were coffin burials (Krogh, 1967, p. 30 et seq.). Finally, the magical number 3 turns up when the dead Torstein asks about Gudrid 3 times and thereby fulfills the prophecy. The chapter ends by relating that Torstein's and the others' corpses were buried beside the church in Eiriksfjord; more precise identification is impossible. But "the church" doubtless is synonymous with

 $<sup>^{79}</sup>$  The first actual monastery was established at Þingeyrar in Hólar diocese in 1112. Before then there was a cloister-like institution in Bær in Borgarfirði from the middle of the 1000's, where there were three monks. See KLNM VIII col. 544 et seq.

the one at Brattahlid, which, as mentioned above, could scarcely have existed at the time in question.

Superstition also flourishes in chap. 431 during Karlsefni's stay in Vinland, where, *i.a.*, a strange woman meets Gudrid, and the moment she disappears a Skrælling is killed.

Karlsefni will take his precautions, because he is afraid that the Skrællings will return a 3rd time.

Chap. 432. "Helgi og Finnbogi ór Austfjorðum" have neither patronymics nor other surnames, which, in my opinion, indicates that they are fictitious persons.

The whole section that deals with Freydis's journey and her return home is so fantastic that no further mention will be made of it. But it should simply be mentioned here that she threatens to divorce her husband if he does not give in to her. Here the author again reveals how unsure he was about the date when Christianity was introduced in Greenland, for if Freydis had been a true Christian, she could not have made such a threat.

#### Conclusion

As the reader doubtless has gradually suspected when going through my examination of the information contained in the two sagas, amazingly little remains that is of any historical interest with respect to Greenland. Furthermore, it should have been possible to trace the growth of the tradition from GH, Islb, and HN to the sagas; thus it should not be difficult to differentiate between the believable and the unbelievable in the narratives that deal with the colonization of Greenland. On the whole, the questionable spots in the tradition about Eirik have a minor relationship with his landnam in Greenland than with BJARNI/LEIF's discovery of Vinland and attempts at colonizing it.

At first glance, the results which the topographical materials in the sagas can give are miserable. Both sagas more or less give us to understand that Herjolfsnes was the first place of call in Greenland, just as other accounts relate.

There is general agreement that Eirik lived at Brattahlid in Eiriksfjord, and yet there is no detailed information about the exact situation of this and other localities. The entry in EsR that states that Eirik gave Thorbjorn Vifilsson land on Stokkenes is symptomatic; that is to say, one place or another in Eiriksfjord or in the Eastern Settlement! As far as the introduction of Christianity is concerned, it is most believable that this occurred after Eirik's death, as Gs states in chap. 429. And thereby the many Christian interpolations and anecdotes about this automatically drop out of the chapters in which Eirik appears. The most

significant question here involves "Tjodhilde's church", which must accompany Leif's and Olav Tryggvason's missionary activities into the world of fantasy.

In regard to the lean year which supposedly took place in Greenland in 1000 A.D., it is impossible to verify this information, which solely is contained in EsR. Perhaps the author makes a year of famine in Iceland in the 990's applicable to Greenland.

In brief: We learn nothing about Greenland in the early Middle Ages beyond that which the earliest historical accounts apparently reveal. But the investigation has strengthened the supposition that Isls have slight value as a source — in this case those sagas that deal with Greenland.

During the 200 years that have passed between the events and their first recording, the narratives have not only been subjected to adaptation through oral narration, but also, because of inadequate survivals, have been augmented by materials from other sources and by constructions resulting from genealogical, chronological, historical, and topographical studies.

Gs identifies Karlsefni as its informant; he and his descendants lived in Iceland, to which the saga is connected. Therefore it can by no means be considered as representative with respect to Greenland.

Some examples which will be given below will show how different the traditions can be when it is a matter of events that concern Greenland and Vinland.

AM 194 (Alfroeði Islenzk p. 12 et seq.; K. Kaalund, 1913, p. 51 et seq.), which apparently was written in 1387 in the western part of Iceland, includes, in addition to a guide for pilgrims composed in the 12th Century, an earlier geographical section in which it is stated, i.a.: Suðr fra Grenlandi er Helluland, þa er Markland. Þa er eigi langt til Vinlands enz goða er sumir menn etla at gangi af Affrika, ok ef sva er, þa er uthaf innfallanda á milli Vinlandz ok Marklandz, þat er sagt, ath Þorfirðr karls-efni hiogi husa-snotro tre ok feri sidan ath leita Vinlandz enz Goda ok kiemi þar er þeir etludu þat land ok nadu eigi ath kanna eingum landz-kostum. Thereafter it is related that Leif was the first to find Vinland, etc. – just as "Heimskringla" states.

The above quotation is in but poor agreement with the saga literature's accounts of the discovery of Vinland, and the mode of expression implies that the author has no knowledge of any written saga concerning these events.

In Hauk's Ldn chap. 175 (Ldn., 1958, p. 106) it is stated quite categorically: . . . Karlsefnis er fann Vinland hit goða . . . Nothing like this is said about Leif, but only i S chap. 92 and H. chap. 79 (p. 50): (Eirikr bio i Brattahlið, enn Leifr son hans eptir hann.

HAUKR is a descendant of Karlsefni, and there is some indication that this information about the former stems from a family tradition. Hauk's Ldn is believed to be the first one he entered into his collection of manuscripts, and presumably he was not familiar with EsR at that time; to judge by its placement in the collection, EsR must have arrived on the scene much later.

A final example of how misleadingly the tradition can develop can be observed from the recently issued map of Vinland from ca 1440 (Gad, 1966, p. 57 et seq.), whose value as a source can definitely be considered secondary. In this, the compiler of the text that accompanies the map has Bjarni Herjolfsson and Leif Eiriksson traveling together and discovering Vinland. Nothing in the Old Icelandic sources even implies that a voyage of this kind could have taken place, but it is remarkable that the discoverers in the two sagas are merged.

These three examples must surely be striking proofs of how vastly different the tradition can be and can become, and at the same time they give warning that texts of this kind must be treated with the utmost care.

#### CHAPTER VII

### The Topography of Norse Greenland

The two regions on the west coast of Greenland that were settled by the Norsemen are referred to in all the sources as, respectively, "Eystribygð" and "Vestribygð". There is no doubt about the topographical placement of these names. The Eastern Settlement, which comprises the major part of the Norse Settlement, is located in the present-day municipalities of Narssaq, Julianehåb, and Nanortalik, as well as around Ivigtut in the so-called "Middle Settlement" – a contemporary designation.

The entire Western Settlement is situated within the boundaries of today's Godthåb municipality.

Those topographical sources that have been preserved provide a discouragingly meager amount of material, which has been subjected to intense work at the desk as well as in the field. Some of these sources have been mentioned and partly characterized above. For reasons given below, I shall not dwell upon them at length here.

Apart from the information the sagas and Ldn provide concerning the colonists who settled in certain fjords (see above), there also is a list that in addition enumerates the churches situated along the fjords. This appears in Fltb directly following Groenlendinga þattr: 80 Here it is stated: Svå margar eru kirkjur a Groenlandi: Herjolfsnes er austast, ok er þar kirkja i Herjólfsfirði, önnur i Vatsdali i Ketilsfirði, hin iij i Vik, enn i Ketilsfirði, hin iiij Vogum i Siglufirði, hin v undir Höfda i Austfirði: hin vj biskudsstóllinn i Gördum i Einarsfirði; hin vij at Harðsteinabergi; hin viij i Brattahlið, enn i Eiriksfirði; hin ix undir Solarfjöllum i Isafirði (ok) hin x; hin xi i Hvalseyjarfirði; xij á Garðanesi i Midfjörðum. Þessar eru i vestri bygð: á Sandnesi i Lysufirði; önnur i Hopi i Agnafirði, þridja i Anavik i Ragnafirði.

Other Icelandic sources include Arngrimur Jónsson's (died 1648) "Gronlandia" and Björn Jónsson á Skarðsás's (died 1655) "Grænlands Annálar" (F. Jónsson, 1899; Í. Barðarson, 1930. See Vebæk, 1965, 1966). The relationship between these two works has by no means been satis-

<sup>80</sup> It is the narrative about Einar Sokkason and the establishment of the bishopric in Gardar 1124. The list is quoted in GHM III's version p. 245.

factorily clarified. There is a considerable likeness at some points, but whether this can be attributed to a common source, or whether Björn drew upon Arngrimur's "Gronlandia", cannot yet be determined. It is extremely likely that both possibilities are valid, and there seems to be no question that "Gronlandia" was written first, perhaps about 1600.81

Fltb is one of Arngrimur's main sources, but he does not place the above-mentioned list of churches/fjords in the same order; moreover, he mentions a fourth church in the Western Settlement, "N.. i Andafjord". This led J. Benediktsson to conclude that in this case Arngrimur used a source other than Fltb (op. cit. p. 353; F. Jónsson, 1899, pp. 297–98 and 321–32). Although it is difficult to determine whether he was right, it is somewhat remarkable that in this single instance Arngrimur could have repudiated the source he used most. Is it possible that he tried to interpret the difficult passages in the list with the help of a lost edition?

In "Gripla", which has only survived as a fragment in a transcript made by Björn Jónsson in "Grænlands Annálar" it is stated: XII kirkjur eru á Grænlandi i hinni eystri öygð, IIIIar i vestri bygð (GHM III p. 222 et seq.). The names of the churches are not recorded, but 4 churches are mentioned, as in "Gronlandia".

"Gronlandia"s other comprehensive description of the fjords in Greenland is contained in Björn; yet there are certain deviations. For example, the first-mentioned work again records 12 churches in the Eastern Settlement, but only 2 in the Western Settlement, namely, in "Lysufjorðr" and in "Ragnafjorðr". Furthermore, Björn only noted fjords and churches in the Eastern Settlement, and only 7 churches: 1) Herjulfsfjarðarkirkja 2) and 3) Ketilsfjörðr, tvær kirkjur, 4) Siglufjörðr kirkja, 5) Ófunndinnfjöðr, þar er biskupsstoll, 6) þa Eyreks fjarðar kirkja, 7) Austkars fjörðr kirkja. ("Gronlandia" pp. 237–38, and notes p. 351, as well as GHM III, p. 226 and MoG 20, pp. 273–78. I.B. 1930, p. 63). Despite the differing number of churches, there seems to be no doubt that a lost list of fjords was the source of both works. This is best preserved as a fragment in Björn's transcript; 2 it is simply incomprehensible that it omits the Western Settlement.

The numerous place names of fjords and so forth will not be mentioned here; over the years they have given scholars considerable trouble.

<sup>&</sup>lt;sup>81</sup> See annotations 1957, p. 332 *et seq*. In my opinion a possible relationship should be determined by a literary historian or a philologist. Unfortunately Benediktsson ignores this problem, and does not even touch upon it in his study of "Gronlandia"s sources.

<sup>82</sup> The now lost manuscript, which seems to have existed in the form of a "small book" ("kver") has the following title in "Grænlands Annálar": Grønlandiæ vetus chorographia á afgömlu kveri. Could it perchance have been in Latin originally, like "Gronlandia"?

But there should be no question about the complete impossibility of identifying the majority of the names on the basis available at present.

Immediately following the list of fjords, both Arngrimur and Björn provide the same, identically-sounding information about the number of farms in Greenland, still using the old manuscript as their source, which are, respectively: Pagos autem sive villas et vicos rusticos in orientali Gronlandia CLXXXX, in occidentali XC connumeratos legimus and "Svâ er talit at clxxxx bygða sè i eystri bygð, xc i vestri".

These remarkably round figures have always been given great credence, even though it is no longer believed that they represent the absolute maximum; the reason for this is that the number of farms that have been registered to date is substantially larger than 190. As of 1967 a total of 220 Norse farms were known to have existed in the Eastern Settlement, 22 in the Middle Settlement, and 71 in the Western Settlement, but more are added almost every year. It is maintained (Vebek, 1964, p. 201) that the reason why these figures differ is that the register includes farms that presumably were abandoned as early as in the Middle Ages. Since we do not know the source of these figures, who compiled them, or, indeed how accurate they are or from which century they stem, it is not advisable to compare them with the registered farms nor to exclude them until other evidence shows whether they should or should not be accepted.

Regrettably enough, upon completing a thorough investigation of the Icelandic materials alone, it must be concluded that little progress can be made in regard to the topography of the Norse Settlements. Fortunately, however, thanks to Ívar Barðarson's (I.B.) account on Greenland, we are not entirely at a loss. By checking this with the Icelandic sources one can proceed a bit further, but, as will be seen below, the results will be far from satisfactory. Ívar Barðarson was a Norwegian clerical who spent several years in Greenland as head of the diocese in Gardar. Presumably this was the Ívar to whom Bishop Hakon in Bergen issued a passport on August 8, 1341 (Dipl. Norv. V, no. 152, p. 122. See also I.B., p. 7 et seq. and A. Steinnes 1958, p. 410 et seq.) This document mentions an Ivarus Barderi, who in nostris et ecclesie nostre negotiis ad Groenlandiam . . . destinamus. Apparently he was in charge of the diocese during part of the time when there was no bishop in Greenland, 1349–68. He supposedly returned to Norway in 1364.

We do not know who wrote down this account of Greenland. It was not Ívar, for it is clearly emphasized at its close: Dette alt som forsaugd er sagde oss Iffuer Bardsen... (I.B., 1930, p. 29). The account is not preserved in the original; the earliest versions date from the 16th Century. None of these has retained the original form of the account, which doubtless can be blamed on a complete lack of a stylistic sense. Never-

theless, certain chapters are valuable both historically and topographically, for they give a better picture of the Norse Settlement in Greenland than the above-mentioned sources.

The description that now is available in F. Jónsson's (1930) publication is the most comprehensive and the most important part of a compilation of rather heterogeneous parts, information about Greenland and the voyage thereto, which derive from various sources. It begins by giving course and distance directions based upon medieval Norwegian and Icelandic knowledge of the distribution of land and sea in the North as worked out in Ldn and other sources. Next come the reports that are assumed to stem from Ívar; these conclude with some comments by the transcribers concerning Ívar's position and stay in Greenland. In direct connection with these there follow some rather apocryphal remarks about Greenland's nature; these can in any case not be attributed to Ívar.

I.B. achieved importance in the archaeological/topographical studies that G. Holm and D. Bruun made in the last decades of the 19th Century. I.B. has since been examined in detail on the basis of the new observations of the farms' locations. As mentioned above, despite its many merits the 1930 version is far from exhaustive. Its greatest defect is the uncertainty about its credibility, which will always be present because the account only exists in late and very poor transcripts. No matter how much one may want to rely on these, there is always room for misunderstandings, and one must use them with far greater care than F. Jónsson took. There is still a long way to go before Ívar's original account can be reconstructed, and many unessential things can therefore be discarded. Consequently, it is to be hoped that an up-to-date critical philological study soon will replace F. Jónsson's frequently rough interpretations, for I.B. is of a certain significance to topographical studies, even though it is by no means as important as some Greenland archaeologists have claimed in recent decades. For Ivar is not "the stone of wisdom" capable of solving the sociological problems of Norse Greenland; his description contains far too many large lacunae and possibilities of misinterpretations. I therefore do not consider it opportune to analyze I.B. until it is available in a critical text which can meet contemporary methodological requirements.

I can by no means agree with P. Nørlund's argument that "one will first have a firm background when all the churches have been found", namely, those mentioned in the sources (Nørlund, 1928, p. 52).

In the first place, the number of churches varies from one source to the other. Thus, Ívar mentions 8 churches in the Eastern Settlement, and as the only one a monastery and a convent and in the Western Settlement one church, former cathedral: 1) Aros church and 2) Petersvik church, in addition to the monastery in Ketilsfjord; the convent was

situated in Hrafnsfjord, and 3) Vagar church supposedly was located in the estuary of the fjord; (Nothing precise is said about its being located in the fjord.) 4) Gardar in Einarsfjord; 5) Hvalsey church in Hvalsey-fjord; 6) Dyrnes church in Eriksfjord; 7) Solarfjöll's church and 8) Brattahlid church at the same place. Stensnes (= Sandnes?) church in the Western Settlement reportedly was once a cathedral and an episcopal seat.

The existence of a monastery/convent in Greenland is apparently confirmed in a letter dated 22 June 1308 from Bishop Arne of Bergen to Bishop Pordr in Gardar. (See Dipl. Norv. X, no. 9, p. 149).

It is another matter that to date more churches have been found in the Eastern Settlement than the number the sources give namely 13; (14 including "Tjodhilde's church"); these include churches of a type that hardly can be described as parish churches, as Ívar states; more probably they were private farm churches or chapels. They are not mentioned in the sources. A further question also comes to mind: how, in some cases, can it be determined whether a large chapel or a small parish church is concerned? Finally, we do not know how many churches suffered the same fate as the presumed Sandnes and Herjolfsnes churches, both of which partly sank into the sea. It is hardly likely that the final solution to the problems connected with the topographical investigations of Norse Greenland can be found. And, as mentioned above, this will not damage future research activities. \*3

Topographical subjects will be dealt with below in a few instances in connection with the treatment of the individual ruin groups.

In conclusion of this topographical examination, mention should also be made of the Greenlanders' hunting expeditions in Norðrsetr.

The only continuous account of these expeditions appears in B. Jónsson's work, and its reliability therefore is somewhat dubious. In "Grænlands Annálar" there is a report of an expedition dated 1266 (GHM III p. 242 et seq.), which he states derives from H, the part that now is lost. Immediately following the account of this expedition, Björn goes on to describe the people in Norðrsetr, partly in accordance with H, and partly as derived from the now lost saga about Skjald-Helge (e.g. Helge the Scald) and from a totally unknown þattr about Tordis. The value of these sources cannot be determined. But it would be decisively important if clear traces of the Greenlanders' stay in Norðrseta, that is, in the area around Disko Bugt and up to Upernavik

<sup>&</sup>lt;sup>83</sup> In my view it is incorrect to go as far as Nansen (op. cit. p. 231), who considers I.B. completely unusable. But Nansen's objections aim in part at a series of additions to the manuscripts which cannot be attributed to Ívar; in part he is essentially interested in a single point, namely, the Skrælling's so-called attack in the Western Settlement, where still unclarified misunderstandings have arisen. He has no real objections to the topographical account itself, e.g., the church property.

could be found. The hunters must have had their more or less permanent quarters here, since in all likelihood journeys took place repeatedly throughout long periods. If this had not been a lasting phenomenon, the King of Norway would scarcely have expressly demanded blood money in 1261 for homicide, not only in the settlements, but also in Norðrseta (GHM II, p. 778). Moreover, the large quantity of bones of game animals in the farm middens shows that one should not underestimate the importance of these expeditions to the economy and existence of the settlements. (See below).

The Kingigtorssuaq stone, which was found north of Upernavik at ca 73° N. Lat. in 1824, is a find that also fires the imagination, <sup>84</sup> but it still remains as an isolated testimony, along with the small, well-preserved stone house called Bjørnefælden on Nûgssuaq. This is the northernmost known Norse ruin, and according to Meldgaard (1965, p. 83), <sup>85</sup> who is one of the few archaeologists to have visited the place, it is a kind of chapel or storehouse.

Artifacts stemming from the Norse settlers have been found in several Eskimo sites on the west coast of Greenland as far north as Thule District. I am in complete agreement with Meldgaard (1961, p. 93 et seq.), who does not believe that the Greenlanders brought these things up here and traded with the Eskimos. Gaming pieces and pot legs of bronze, a fragment of a coat of mail, a spoon case, and so forth, are not typical trading goods. They closely resemble the refuse found at the farms. The Eskimos found them here after the Greenlanders left, whereupon the artifacts circulated among the Eskimos; some ended up at Thule.

The Greenlanders' old hunting district in North Greenland is an area that has not yet given an opportunity of systematic archaeological investigations of the Norse settlers, but we look forward with anticipation to expanded studies.

<sup>&</sup>lt;sup>84</sup> The runic stone is in the collections of the National Museum Copenhagen. The inscription was studied in detail in 1932 by M. Olsen, p. 189 *et seq.*) who dates it at the spring of 1333.

<sup>&</sup>lt;sup>85</sup> J. Meldgård has informed me verbally that during the excavation in 1953 he found a thin cultural layer which was investigated, but which amateur archaeologists had unfortunately done earlier, too. The ruin was also measured. Result: No finds, but the character of the building's masonry is distinctly Norse.

# CHAPTER VIII

### The Norse Settlements

Following this presentation of the limitedly useful topographical sources, it is appropriate to turn to the archaeological sources proper. (See the maps of the two settlements that show the ruin groups that were registered prior to the summer of 1967). The Norse Settlement is grouped around the inner parts of the fjords and the inland between them, for this was the only place where animal husbandry and, to a lesser degree, the cultivation of corn, the bases of the Norse colonization, could be carried on. The farms are situated at practically all of the suitable places, near rivers and lakes; in some places, particularly in the central part of the Eastern Settlement, they are close together, in others, such as in the region north of Kap Farvel, and in the area the archaeologists term the Middle Settlement (M I, etc., on the map) the settlement is considerably more scattered. In contrast to the rugged and barren archipelago near the sea where the Eskimos settled later on, these regions had pastures where the grass grew high, the thickets were lush, and there were small woods of birch and mountain ash that grow taller than a man.

As the map of the Eastern Settlement (Map I) shows, one of the densest settlements was situated on the large peninsula between Nordre Sermilik and Tunugdliarfik, the Greenlanders' Isafjord (?) and Eiriksfjord. In the latter fjord the settlements differ on the eastern and the western shores, respectively. On the eastern side most of the farms are fairly small, whereas on the western side they are large. The eastern shore has good harbor facilities, but the hinterland has meager pasture land. The western shore lacks the first advantage, but has, on the other hand, some of the best pastures; yet it is exposed to the powerful northeastern storms that sweep down across the plain from the inland ice.

The other densely settled area is situated on the large peninsula that stretches between the Igaliko Fjord and Lichtenau Fjord (Agdluitsup kangerdlua) out into Davis Strait. In the innermost part of the peninsula there is a land area measuring 550–600 km², with numerous lakes and rivers that are replete with salmon, etc., fertile valleys where the grass is lush, and there are dense growths of birch and willow, with the birches reaching a considerable height in some places and where mountain ash

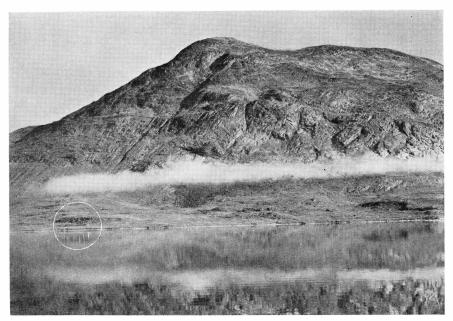


Fig. 1. Hvalsey, Eastern Settlement No. 83. The farm buildings lie on the flat foreland in front of the small cliff. The church appears in the centre of the white circle. (From Roussell, 1941, fig. 15).

grows here and there; all this is framed by steep mountains. Ca 40 farms have been found in this district, the Vatnahverfi of the Middle Ages. The northern fjord was called Einarsfjord, but it is more difficult to identify the southern one, which can scarcely be designated as Hrafnsfjord, as stated by C. L. Vebæk (1965, p. 47; 1966, p. 208).

Apart from a few isolated localities far south, at Naujat in Fiskenæsfjorden and Eqaluit in Agdlumersat (where no dwellings have been found, however), as well as a single farm at the head of Buksefjord, the Norse settlement in the Western Settlement (Map II) is gathered quite closely around the inner branches of Godthåbsfjord and Ameralik, as well as in the valleys that are connected with these fjords.

When the settlement of Greenland took place, the location of each farm was chosen for quite specific reasons. The place had to be sheltered, preferably close to a fjord, with access to a good and natural landing place. In addition, there had to be a river or a stream with clear running water, and a tolerably flat stretch of land for the homestead (croft). From here the path up to the mountain pastures should not be too steep. The most ideal places were those where there was easy access to steatite.

The location of the dwelling was most characteristic, always on a prominent place in the terrain, often with a large mountain behind it, so that the front of the house and its entrance could be seen in its full

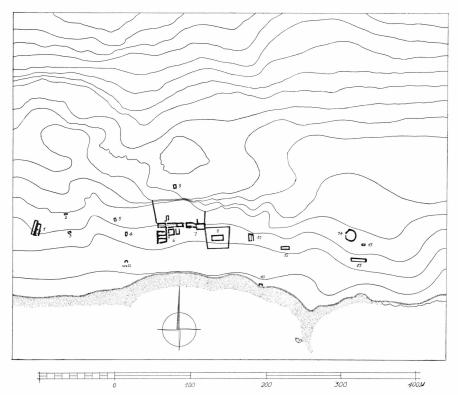


Fig. 2. Hvalsey, Eastern Settlement No. 83. Contour map 1:5000. Contours 5 metres. 8: church, 6: house, 9-10: store-houses, 1 and 7: byres with barns, 14: horse paddock, 2, 3, 4, 5, 11, 12, 13: small livestock buildings, 15: grave (?). (From Roussell, 1941, fig. 18).

dimensions from the shore. In order to emphasize this impressive sight, a steep hill or knoll was chosen for the house, often at the cost of easy access to fetching water, to say nothing about other advantages. The main object obviously was a desire for an elegant effect, and an extensive and grand view. Around the croft, which is surrounded by turf-lined dikes, cattleshed and barns were built close to the dwelling. Farther back there are small pens or stalls for horses and sheep, and far ahead on the croft, storehouses and the like. Sometimes there is a bath house or a smithy. At the beach now and then boathouses. At those sites where a church is connected with the farm, the church and churchyard are situated within the croft at a varying distance from the dwelling. (In illustration of the above-mentioned, reference is made to the three farm complexes on Brattahlid Plain (Fig. 3) and Hvalsey (fig. 2).

For obvious reasons the inland farms could not take into consideration the situation of the dwelling in relation to the fjord. On the other hand, weight was placed on a number of other factors. Farm Ø. 167 is

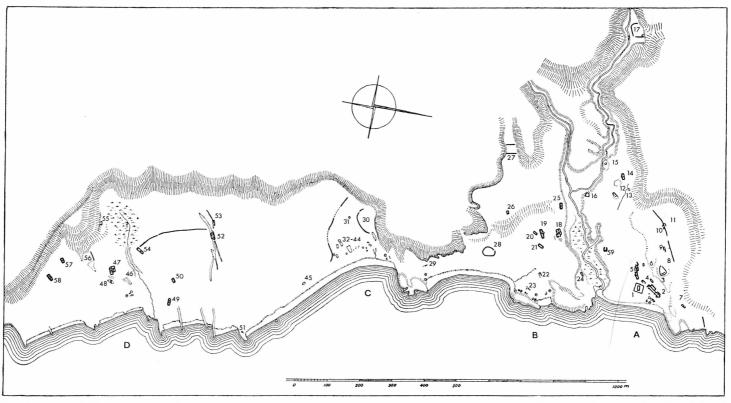


Fig. 3. Brattahlid, Eastern Settlement No. 28 and 29. Survey map 1:10.000. The place is now called Qagssiarssuk. On the plain of Brattahlid lie the ruins of three farms. Some of the many ruins are mentioned in the list below.

A. The so-called "Eirik the Red's farm". 1: church, 2: house, 3: storehouse, 4: stable (?), 5: large livestock block with barn, 6: byre, 7: byre or storehouse, 8: milking pen, 9: storehouse, 10-11: small byre with pen (?), 12: byre and barn, 13: byre or barn, 14: byre or stable and barn for cows or horses, 15: storehouse, 16: pen, 17: sheep pens. Eskimo ruins from the 17th and 18th centuries are marked e. "Tjodhildes church": 59.

B. "The River Farm". 18: house, 19: byre, 20-21: stables, 22: storehouse, 24: shed, possibly for sailing and fishing gear, 25: byre and barn, 26: store-

house (during the 17th and 18th centuries this small ruin served as an Eskimo burialplace; no less than 11 stone cists were built in and near the ruin), 27: pen, 28: pen (?) - see below, 30: pen.

C. 32-44: groups of booths: thingstead (?) or trading-place.

D. 46: house, 47: block with living rooms, byre, barn, and smithy, 48: storehouse, 49: byre and barn, 50: byre, 51: storehouse, 52-53: goat-or sheeppen, 54: byre or stable and barn, 55: small pen, 56: dike, 57-58: byre and barn. (From Roussell 1941 fig. 24).

located at the highest altitude of any farm found to date. It is beautifully situated beside a small lake in the inner part of Vatnahverfi.

As mentioned above, it has been demonstrated that there were at least 220 farms in the Eastern Settlement, and 70 or a few more in the Western Settlement. In the course of time the abandoned farm complexes have deteriorated into low, stone-filled, and overgrown heaps. In a few instances the outline and plan of the buildings can readily be determined; it can even be ascertained that one house was built upon the ruins of an earlier one. Thanks to permafrost, the state of preservation often is amazingly good. The majority of the farm complexes and churches excavated to date stem from the later phases of the settlement, but unfortunately many of these have not been adequately investigated; recent excavations have already revealed the existence of earlier Viking constructions in lower layers. (See below).

# **Building Materials**

The building materials employed are typical of those used in Western Norway and the Atlantic Islands: turf, stone, and timber. The houses were built of stone or turf alone, or of a combination of the two materials. One might think that timber was the most serious problem involved, for in Greenland trees do not grow particularly tall, and are therefore unsuitable for this purpose. Meanwhile, an important supply of wood was the driftwood which was carried by the Polar Stream from Siberia. In addition, voyages apparently took place to the American mainland on the same errand. See Excavations of the farms, including the earliest ones, have shown that timber was used profusely, frequently in unnessessarily large quantities for the construction of roofs, doors, fixed benches, and wainscoting. The middens contain masses of wood shavings discarded during carpentry.

In the North turf often has a particularly good and firm substance, which makes it well-suited as a building material. Because it crumbles so slowly, it becomes a dense mass. There were two methods of cutting the turf: 1) in sheets 5 cm thick in which only the actual turf was dug up, together with entangled roots. These are ca 20 cm wide and 1 m long, and are called "strengur"; they are placed in the wall as a kind

86 "Islandske annaler til 1578" 1888, p. 213 under 1347 (Skalhóltann.): þa kom ok skip af Grænlandi minna at vexti enn sma Islandz fór. þat kom i Straum fiorðinn yttra. þat var akkeris laust þar voru a xvij menn ok hofðu farit til Marklandz enn siðan vorðit hingat hafreka.

Translation from old Norse: "Then a vessel, small sized, came from Greenland to Iceland. It came into Straumfjord. It has lost its anchor; they were 17 men and they had sailed to Markland but thereafter they were driven hither (i.e. Iceland)".

of reinforcement. 2) The thin horizontal layers alternate with layers of thick turf laid diagonally against one another in a herringbone pattern; they are called "hnaus", and the whole technique is known as "klömbruhnaus." These occur in the earliest farmhouses and throughout the Middle Ages.

Stone, a good and natural material, was used to a very considerable extent. Gneiss, which splits of its own accord in parallel sheets and furthermore can easily be split by means of wedges, was mainly used. Then there also is the locally limited red Igaliko sandstone, and, finally, steatite, both in the form of large blocks and, in rare instances, richly decorated with carvings. (Nørlund, 1930 p. 40, fig. 17).

As a result of this local choice of building materials many buildings had a special character from the start and were clearly different from the usual buildings in Iceland and elsewhere. The front of the house is completely covered by stones that cover the inner turf wall; the outhouses also had their distinct characteristics, as the following comments, which are based on excavations made to date, will show. (See survey I).

## CHAPTER IX

# Development of the Dwelling Types

## The Long-house

The type of dwelling the colonists brought to Greenland is the one that was prevalent in West Norway and on the Atlantic Islands in the late Viking Age (M. Stenberger, 1943; Aa. Roussell, 1941; J. R. C. Hamilton, 1956; Jan Petersen, 1933-36; A. O. Curle, 1939). This was a typical long-house, in which the dwelling consisted of a single long room that could be divided into more sections by wooden partitions. The entrance was on the long side of the house, placed asymetrically before the central point of the building. The long walls grew narrower toward the gables, which had rounded corners, whereby the ground plan is ovalshaped. The long-house is not particularly well-represented among the excavated sites in Greenland. But there can scarcely be any doubt that they will appear more frequently in the coming years, for now the archaeologists are prepared to a far greater extent than before also to excavate the earliest part of the sites, even though this is done at the expense of the later parts' better-preserved walls and floors. To date one has hesitated to "destroy" these, as one felt that it would spoil the attractive appearance of the ruins, and all too often consoled oneself with the thought that there was nothing of any significance to see.

The so-called "Hall of Eirik the Red" in Ø. 29a was excavated and described by M. Stenberger in 1934 (Nørlund & Stenberger, 1934, p. 48 and p. 141; Roussell, 1941, p. 138). It was considered to be Eirik's possible dwelling, which later developed into a passage-house. This was done even though the investigation revealed the ruins of an earlier house under the hall; thus one clung to the somewhat romantic interpretation and dated the hall to the 11th Century. This dating is open to criticism, alone on the basis of the fact that in such case the dwelling should have existed about 500 years, which is completely impossible. It is extremely regrettable that Stenberger's curiosity did not permit him to continue with the site under the northern end of the hall. It was not until 1965 that K. Krogh organized a re-excavation here and discovered the most

beautiful curved long walls on a dwelling of the earliest type. <sup>87</sup> Longhouses with curved corners have also been found in the Western Settlement under V. 51 and V. 52. a (Roussell, 1936, p. 31 and p. 65; 1941, p. 149). In V. 51 even more good details were preserved, but "Chief interest attaches to the house built over it." V. 52a presented many difficulties during the excavation; accordingly, the dwelling can not be considered as excavated to its fullest extent. Already at an early date it became clear that there was an earlier house under the southeastern part of the later central farm-building, but unfortunately the permafrost prevented satisfactory observations. In view of modern excavation techniques this should not be a hindrance of any significance, and since the earliest site apparently was devastated by fire, we can hope for good results through new excavations.

The best example to date of the earliest type of long-house is the dwelling in Ø. 17a at Narssaq (Vebæk, 1964; Moltke, 1961). \*\* The farm seems to have comprised at least 10 buildings, many of which presumably plunged into the sea, which is still breaking down the cliffs along the shore.

The dwelling was built on somewhat sloping ground, oriented N–S and facing the fjord. The total length of the house was ca 36–37 m, and its width between 6.5 and 9 m. (See also fig. 4) (I wish to point out here that the outer walls on the plan are only postulated. In some places the rear wall was, for example, ca 5 m thick). The investigation showed with certainty that the dwelling originally consisted of one room with unmistakably curved long walls. Later on it was extended both northwards and southwards, to begin with presumably with two rooms at the northern end. The rear wall was fairly well-preserved, but the front wall at the western side, in common with the southern part of the house could scarcely be determined; consequently the entrance could not be placed with exactitude. The earliest section measured ca  $14.5 \times 8-9$  m, on the in-

<sup>87</sup> Told to me verbally by K. Krogh. It appeared that Stenberger had cut through the very distinct turf walls without being aware of their existence. The stones that put him on the track of the earlier site seem to have been removed by the time of the 1932 investigation! It is anticipated that excavations on a larger scale will take place in the coming years.

<sup>88</sup> I took part in the excavation in 1962, and in addition to the above-mentioned material, I have made use of my own notes taken on the site. Preservation of the ruin group, which was in a very poor condition, was revoked after World War II, for it was not considered of particularly great value. Consequently, irreparable damage had already been done when an excavation was nevertheless initiated as a result of the find of a very significant rune staff. (See p. 83 and 100). In this connection it should be mentioned that after the investigations were completed in 1962 the area remained without protection; this is most deplorable, as several of the ruins, as well as the major part of the midden, have not yet been excavated.

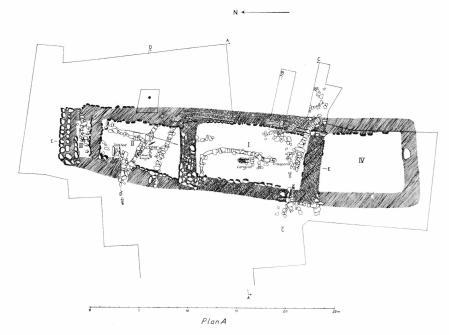


Fig. 4 a. Narssaq. Eastern Settlement 17 a. Plan A: Dwelling. The earlier parts of rooms I and II are included in the drawing of this plan. It should be noted that it is uncertain that everything that is shown on the drawing of this plan existed contemporaneously. (C. L. Vebek del.).

side ca  $11 \times 5.5$  m. The east wall was several meters wide, and the construction of the wall was different from that in the later section, where the turf wall was not so thick and there were no supporting stones beneath the turf construction. Approximately in the middle of the room there was a stone-lined, longfireplace; the floor was partly paved with stones.

A very ingenious and complicated drainage system combined with a water supply, was found throughout the dwelling. As already mentioned, the house was not situated on level ground, and in order to avoid the melt water and rain that flowed down from the mountain from overflowing the floor, from the start narrow, rather deep ditches were dug and covered by stones. When the house was built, a ditch was dug under the rear wall (see fig. 4 A, room 1) directly behind and along the inner row of foundation stones. This outlet presumably curved, and continued outside the dwelling and down across the terrain in a west-northwest direction. In addition, there were two stone-covered ditches that ran out through the front wall. Apparently there was a water reservoir in the southern end of the channel beside the long-fire, in which the remains of a small wooden pail were found. And in the later extension, rooms II and III, of the

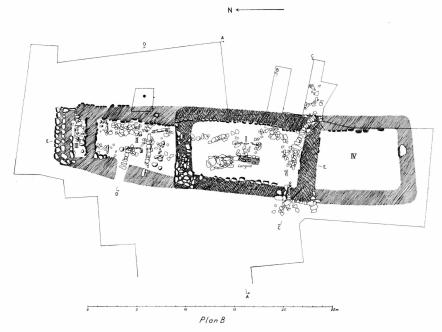


Fig. 4 b. Narssaq. Eastern Settlement 17 a. Plan B: Dwelling. The later parts of rooms I and II are included in the drawing of this plan. It should be noted that it is uncertain that everything that is shown on the drawing of this plan existed contemporaneously. (C. L. Vebek del).

dwelling there were both outlets and water supply installations on a still larger scale (see fig. 4 a and b). Although there was no long-fire here, there was a small fireplace just inside the entrance. It was also discovered that as the layers of refuse on the floor grew, new drains were built upon the old ones. It must also be taken for granted that there cannot be much difference between the age of the earlier and the later rooms.

It is possible, on the basis of the finds, to limit the relative dating as revealed by the dwelling's structure proper. First and foremost, this is a question of the rune staff which inspired the excavation. It is a slightly irregular quadratical staff of pine 43 cm in length. On the A-side there is a mythological inscription, on the B-side: the fupark alphabet; the C-side: magic runes that cannot be interpreted; D-side: runes that can be construed as "literary exercises". E. Moltke (1963, p. 402)<sup>89</sup> dates the rune staff ca 985–1025.

<sup>89</sup> He points out that the r-rune in the inscription on side A has a form that must be viewed as a forerunner of the specific Greenlandic form that we find on medieval inscriptions in the same place. The carver must therefore have spent some years in Greenland. The rune staff's alphabet is Norwegian (950–1050). But since there are also some earlier Norwegian forms, it is dated ca 1000.



Fig. 5. Narssaq. Eastern Settlement No. 17 a. The large drain in room I seen from the northwest. In the right background the remains of the great stone-built long fire.

(Henrik Jansen phot.).

Furthermore, arrowheads made of reindeer antlers were found in the lowest and earliest layer. Types exactly like these that date from the late Viking Age and the early Middle Ages have been found in Norway and Iceland as well as of iron as of bone. (Jan Petersen, 1919, p. 48. The same type, namely 1 of iron and 1 of bone has, moreover, been found in V. 52 a., in the midden and on the site of the earliest house, respectively. See MoG. 88, 2, p. 107 and p. 109).

Finally, a fragment of a wooden sword calls for mention; it must either have been a weaving sword or a toy, whose form can be traced to the 11th Century. Unfortunately, no objects were found that can indicate an accurate date of the dwelling's abandonment, but presumably the house survived throughout some generations, as extensions, indoor reconstructions and the thick layers of floors show. It may have been replaced by a new dwelling at a later date, one which, as we have seen before, may exist in the ruins that have yet to be excavated.



Fig. 6. Narssaq. Eastern Settlement No. 17 a. Segment of the drainage canal system seen from the northwest. The photo shows the stone-flagged drainage canals, two of these, which belong to the latest part of the dwelling, are on a higher level than the others. (Henrik Jansen phot.).

Without comparison, the installations of drains and water reservoirs that have been noted here are the most comprehensive one is known to have existed in Greenland. In the great hall at Brattahlid (Ø. 29 a) there are both drains and water reservoirs (Nørlund & Stenberger, 1934 p. 48); in Ø. 2 and Ø. 83 there are only drains (Roussell, 1941). But as far as all of these are concerned, only the later dwellings come into question, namely, the passage-house. If comparable installations can be found in long-houses, up to the present this can only be done outside Greenland.

JAN PETERSEN (1933–36, vol. I p. 41 and p. 48) found drains in houses 1 and 4 in Storsheien, Store Svala in Rogaland. The buildings are dated at some point in the 9th Century. In addition to this example, I have found parallels in Freswick on Caithness, where Curle (1939, p. 70, and pl. 38.1) excavated a 10th Century dwelling, as well as at Jarlshof,

where J. R. C. Hamilton (1956, p. 107, fig. 52) demonstrated the like in a house dating from the first half of the 800's. Here, an obviously later addition, a stone-covered outlet emerging from both the south and the north wall was found. In another house, dating from the late Viking Age or perhaps from the beginning of the 12th Century, an aperture measuring 1 foot and 9 inches, covered by a large flat stone, was found in the south gable, which could indicate that there was an outlet to the farmyard (Hamilton, 1956, p. 160, fig. 74, plan of house 6).

These examples show that the constructions that have been described are not specific for Greenland, but existed in other Norse areas, both before and after the colonization of Greenland. But it should be made clear that it has been impossible to trace examples as complicated and ingenious as those in the farm at Narssaq.

The houses that are described above, with their long, curved walls and rounded corners were formerly classified along with other types of long-houses, such as the long-house with one or more rooms! Aa. Roussell adopted this theory in his thesis in 1941 (p. 136 et seq.). In addition, he differentiated between the passage-house, with rooms in rows behind one another, connected by one or more passages, and, finally, the third type of house, the centralized farm, in which dwelling, stalls, barns, and so forth are in one and the same block!

In my opinion, his classification of the long-house and its development in Greenland is too limited; instead, I would like to propose the following preliminary working hypotheses, well-aware though I am that the material is extremely meager. As will be seen below, at the stage described so far, the long-house develops into a type that once more is a forerunner of the extended long-house, which is a predecessor of the passage-house. Roussell was aware of this to some extent, but mainly because of very slight material on long-houses, he failed to reach a conclusion on this basis, preferring to place all of them in the same group. As an example of the Greenlandic long-house type he used the late dwelling in  $\emptyset$ . 51 (e.g. Roussell, 1953).

At the second stage of the development of the long-house there is an apparent tendency to separate the functions of the large room. This change may have taken place early, to judge by the farm called Stöng in Pjórsardalur in Iceland, which is believed to have been destroyed when Hekla erupted in 1104 (or 1106). The dwelling consists of a large room, with its only entrance near the east gable, and with a couple of additions

<sup>&</sup>lt;sup>90</sup> See Stenberger, 1943, p.72 et seq. and KLNM V, col. 630 et seq. K. Eldjarn, who wrote the latter, believes that this type of farm predominated in the 11–12 hundreds, and that this is the farm which is mentioned repeatedly in the saga literature. Concerning the discussion about V. Gudmundsson, 1889, reference is made to Nørlund & Roussell, 1936, p. 85 and Roussell, 1941, pp. 136–213.

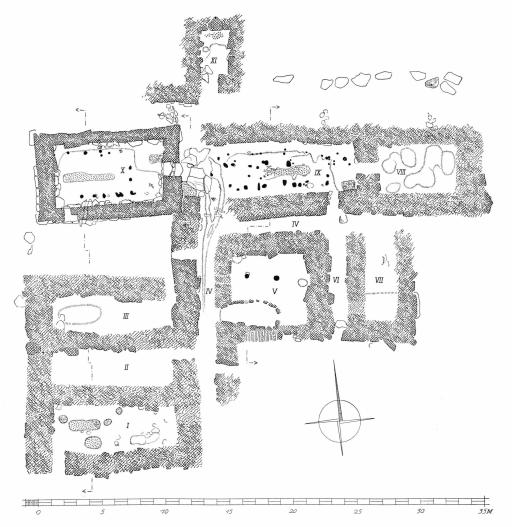


Fig. 7. Hvalsey. Eastern Settlement No. 83, ruin 6. The house-block, plan 1:300. Room X: The fine hall. IX: The old hall (?) (From Roussell, 1941, fig. 87).

on the rear wall. This type is represented in Greenland to a very limited extent as yet. In an extended state  $\emptyset$ . 17 a can perhaps be placed in this group, even though the addition to the rear wall is missing.

In its present state the now very deteriorated dwelling in Ø. 83 (Hvalsey) (Roussell, 1941, p. 141 and p. 154 – Roussell maintains that room IX originally was a long-house of the same type as the Brattahlid hall, which cannot, in any case, be said) is a typical passage-house, but the northern part, *i.e.*, rooms VIII, IX and XI are reminiscent of the above-mentioned stage. Unfortunately, the excavation of this dwel-

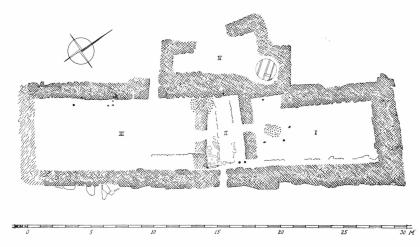


Fig. 8. Western Settlement No. 51 (Sandnes?). House plan 1:300. I: living room. II: ante-room. III: sleeping room. IV: pantry, according to AA. Roussell's interpretation. (From Roussell, 1936, fig. 18).

ling was not particularly successful; new excavations are absolutely necessary if my assumption can finally be confirmed.

The third and final stage of the development of the long-house is, as mentioned above, represented by the dwelling in V. 51, which Roussell (1936, p. 31, fig. 18; 1941 p. 149; 1953 p. 127) describes as a characteristic example of a fully-developed long-house. The dwelling is orientated N-S. During the excavation it was impossible to determine the final placement of the south gable. The main entrance was in the middle of the front wall, which was built of large blocks of stone; this extended into a vestibule that was three or more meters wide.

In the rear wall there was a door that opened outwards. This must obviously have been used to enter an extension of the dwelling which could have been a storeroom or a pantry, for here the remains of a barrel having a diameter of ca 1.70 m were found. Roussell maintains, furthermore, that there may have been one or two more small additions on the rear wall, but this can no longer be demonstrated. These may explain why it was necessary to go out of the house in order to fetch things from the storeroom. In the other dwellings of this type one enters this room through the vestibule; the room also seems to have functioned as a fire-house (kitchen).

The central vestibule or entrance hall possibly had a separate ridged roof of its own, placed across the front wall. The standard type is known to have existed in Shetland, as well as in Norway and Sweden at a much later date. In Shetland English building techniques doubtless were influential.

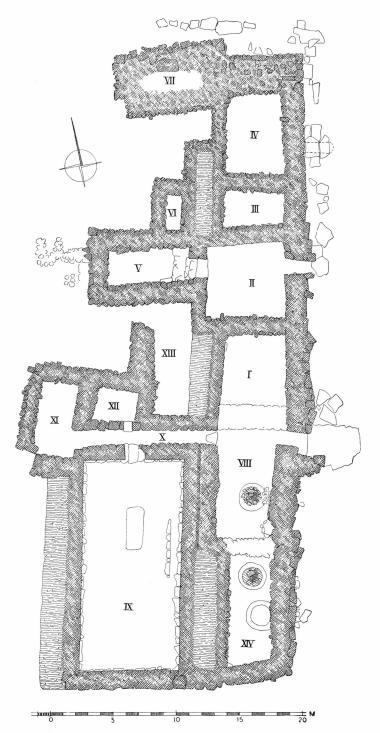


Fig. 9. Eastern Settlement No.47, ruin 8, Gardar (Igaliko). The episcopal residence. Plan 1:300. IX: the hall. (From Roussell, 1941, fig. 91).

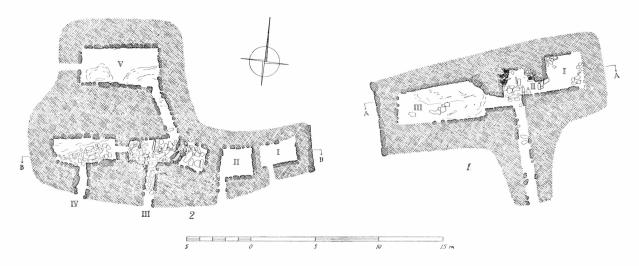


Fig. 10. Eastern Settlement No. 64c. Buildings. 1: house, 2: livestock (and dwelling?). Plan 1:300. (From Vebek, 1943, fig. 41).

The episcopal residence in Ø. 47 is another example of this type of house (Nørlund & Roussell, 1929, p. 77; see plans fig. 41 and 42). I believe that P. Nørlund is correct in interpreting the earliest type of the passage house as an original long-house; but it is doubtful whether the large dwelling complex is simultaneous.

Furthermore, Ø. 64c, ruin no 1, should be mentioned, for even though it apparently had no additions, the excavators nevertheless may have failed to notice them, as the whole site was covered by a 1–2 m thick layer of shifting sand (Vebek, 1943, p. 59).

- Ø.71 (The North Farm) and Ø.167 (the earliest dwelling complex) can likewise be classified in this group (Vebæk, 1952, 1953. I have not seen drawings from the excavations, but Vebæk has oriented me.)
- Ø. 20 was excavated by D. Bruun in 1894, and as his plan must evidently be considered a sketch, its classification in this group must be viewed with extreme care (Bruun, 1896, p. 265. New excavations would also be desirable here, for the dwelling seems to contain several things that have not been observed before, for example, large long benches constructed of clay, stones and earth).

Finally, in addition to the above-mentioned dwellings, several others have been excavated. Although their condition unfortunately was very poor, they can under all circumstances be characterized as long-houses. This applies to Ø. 111 (Nørlund, 1924) (Herjolfsnes), Ø. 149 (Vebæk, 1953) (the convent), M. 15 (Vebæk, 1956; the site was considerably disturbed by Eskimo ruins) and V. 7 (Roussell, 1941, p. 32 – this appears to be a very peculiar long-house).

#### The Passage-House

The long-house with its central entrance hall must be the prototype of the passage-house proper, which collects the dwelling's gradually growing number of rooms along a long passage that runs crosswise through the house. Roussell believes that this appropriate house, which, according to him is only known to have existed in Greenland and later on in Iceland, originally was erected as a protection against the cold winters, and that it first appeared in Greenland (Roussell, 1941, p. 202. See also pp. 151–59).

This should not be taken too seriously, for the Icelandic material is very meager. The earliest dated passage-house in Iceland is Gröf farm in Óræfi, which was destroyed by a fall of volcanic ash in 1362. Yet since this dwelling has so many features that are typical of the long-house, it can be mistaken for one of these at first glance; principally, however, the long narrow passage is fully developed. K. Eldjarn (KLNM V

col. 634) believes that the passage-house originated in Greenland somewhat earlier, but does not think that the Icelandic passage-house was patterned upon it. This type of dwelling was created independently. But, as mentioned before, it is too soon to arrive at final conclusions.

A total of 9 (10?) dwellings of this type have been excavated, to date exclusively in the Eastern Settlement.<sup>91</sup>

Until now, D. Bruun's somewhat rudimentary sketch of a very rough excavation has been used as a textbook example (Bruun, 1896, p. 216; Clemmensen, 1911, p. 323). In principle one should avoid using such unreliable sketches; therefore I shall use Ø. 29, ruin 18 ("The River Farm" at Brattahlid) as an illustrative example, even though this is not entirely typical. (Fig. 11).

The walls of the house are poorly preserved in several places, yet this is not true of the main entrance, which faces out towards the fjord. This entrance does not lead into a kind of corridor, as usually is characteristic of this type of dwelling, cp., e.g.,  $\varnothing$ . 2,  $\varnothing$ . 29a,  $\varnothing$ . 83, etc. On the contrary one steps straight into the largest room (I), which measures  $7 \times 5$  m.

The above-mentioned dwellings in  $\emptyset$ . 29a and  $\emptyset$ . 83 are mediumsized. The most pompous of them all, seen also on a Scandinavian scale, is the episcopal residence in  $\emptyset$ . 47, with its fantastic hall constructed of sandstone. (See Fig. 9).

Other excavated passage-houses include Ø. 66 in Qagssiarssuk in an eastern branch of Igaliko Fjord, which perhaps is identical with Undir Höfda.<sup>92</sup> In 1939 C. L. Vebek investigated Ø. 78a in Eqaluit, but since the state of the dwelling's preservation was so poor the excavation was abandoned; yet its type could be determined (Vebek, 1943, p. 71, 1952, 1953).

On the same occasion C. L. Vebek excavated Ø. 64c, ruin 3, at Igaliko Fjord (Fig. 10), which in his view is a house having the character of a dwelling, but was more likely used for the farm's livestock (Vebek, 1943, p. 74). It should be mentioned that the whole farm complex was unusually well-preserved, thanks to a ca 3 m thick layer of shifting sand. In my opinion this interpretation is incorrect, for there is no indication of a function of this nature; in particular, a bath-house with an oven

<sup>91</sup> As long as more farms in the Western Settlement have yet to be investigated, it is too early to see anything remarkable in this; perhaps V. 53 d was a passage-house originally. See p. 97.

Nørlund excavated "The River Farm" and published his results in MoG. 88,1, pp. 72-78, but D. Bruun also made investigations here in 1894. (Bruun, 1896). Compare his drawing p. 287 with Nørlund's p. 73.

<sup>92</sup> Bruun 1896, p. 372 *et seq.* Here several ruins were covered by shifting sand, but we still lack a really scientific investigation of the dwelling. Through a small excavation Clemmensen (1911) tried to supplement Bruun's of 1894.

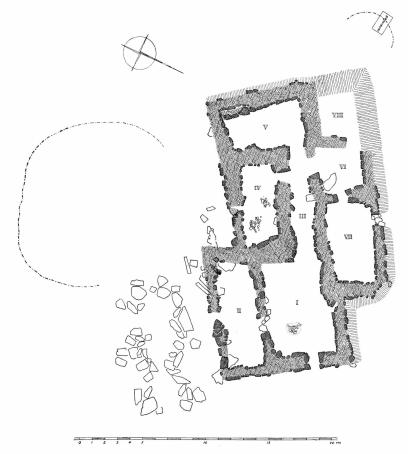


Fig. 11. Brattahlid, Eastern Settlement No. 29, ruin 18. "The River Farm", plan 1:300. The stippled lines indicate the middens. (From Roussell, 1941, fig. 95).

was disclosed, and furthermore a fireplace of the same type as that in the dwelling in V. 7 was found in the largest room (V) (ROUSSELL, 1941, p. 199, fig. 124). Thus there is more indication of a passage-house type than of a stall complex. Nor is this the first time that several independent buildings have been found existing within the same farm complex. Finally, this dwelling may have replaced an earlier one, which is most probable.

Ø. 70 and Ø. 71 ("The South Farm") in Vatnahverfi are two doubtful passage-houses (Vebæk, 1952, 1953). The former has not yet been completely excavated; incidentally, several good finds have been made here. Like the above-mentioned "The North Farm", this is an independent farm complex comprising 8 buildings.

This was an outline of the passage-house material as available at present. It is not particularly comprehensive, but we have a definite

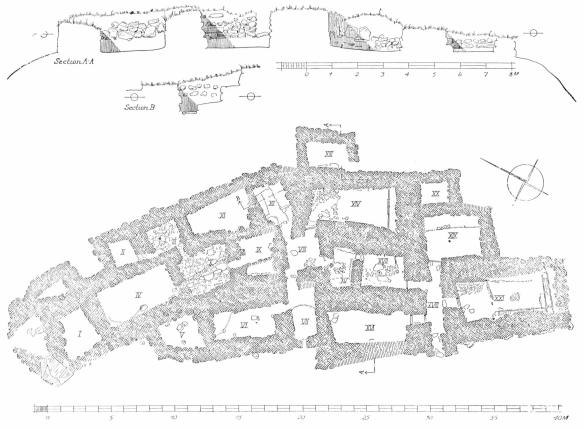


Fig. 12. Western Settlement No. 53d, Austmannadalen 5., plan 1:300, section 1:150. XVI-XXI: living quarters, XV: bathroom (?), XII: larder, X: byre, IV: barn surrounded by small sheep-cotes, goat-pens and storerooms.

In room XXI fragments of wall benches were found, also remains of the profiled wooden wall-panels. They must have been about 165 cm high. On the floor there was, among other things, a crucifix carved in wood, 98 (!) loom weights, and the heald stave for the hand loom. This stave was almost 2 m long. There was a fireplace in the corner of the room. (From Roussell, 1941, fig. 110).

concept of the type, and no exceptional changes can be said to have been revealed since Roussell's treatment of it in 1941. The date of the passage-house's origin in Greenland will be discussed below.

#### The Centralized Farm

This special type of farm has only been found in Greenland.<sup>93</sup> It consists of a huge block of houses with dwelling rooms, stalls, storehouses, indeed, even a smithy, all of which were at an earlier date sharply separated. (Fig. 12).

According to Roussell, the centralized farm came about as a measure against the cold, and in the first place in consideration of the stalls. It is possible that sheep and goats could stay outdoors in Greenland throughout the winter when the weather was comparatively mild, but under all circumstances cows and horses had to be kept in stalls. At an earlier date these were constructed with extra thick turf walls, and in addition the entrance was formed in the shape of a long, curved, and narrow passage, almost like in the Eskimo's turf houses. But in several places the universally prevailing Icelandic custom whereby the cattleshed is an isolated long building with a hay barn at one end was abandoned; see, for example, at Brattahlid and Gardar, etc. Instead, the cowshed was made the center of a whole complex of stalls and barns, so that as far as possible it had no outer walls; see, e.g., V.51 (Sandnes). This approaches the principal of the central farm, in which the cowshed is situated in the center of the complex and the rest of the rooms are connected with one another; thus it was often possible to avoid leaving the house in order to tend to the livestock. (Since Roussell 1941, pp. 217-30 explained the development of the stalls on the basis of the then available material, nothing has occurred in this field; and the number of new excavations is quite limited. He discusses the central farm on pp. 159–90 and pp. 211–12).

This type of farm has been excavated in both the Western Settlement and the Eastern Settlement. ROUSSELL (NK XVII p.129) claimed that the central farms only were found in the inland regions, never directly beside the fjord. This is incorrect, for even in the material he had at his disposal farms of this type are situated along the coast, e.g., V. 8 at the bottom of Ujarragssuit Fjord, V. 16 in Kangersuneq, Ø. 28 (Brattahlid no. 47).

93 In a letter to the writer of this paper K. Eldjarn writes in 1967 that among the few medieval farms that are known in Iceland, there is none that can be characterized as a centralized farm in the Greenlandic form. But, Eldjarn continues, it is safe to say the actual core of the central farm in Greenland is in good correspondence with the plan the Icelandic farms had from the middle ages up to a much later period. The farms received their "centralized farm" character in Greenland from the small additions that were made there.

The 10 (12?) more or less scientifically investigated farms will be discussed below.

- Ø. 28 on the Brattahlid plain is a small farm with 8 rooms; it is not quite typical, for there are remarkably many separate houses around it. In addition to the dwelling it apparently consists of a sheepcote, barns, and a smithy (Nørlund & Stenberger, 1934 p. 92; Roussell, 1941, p. 159). This was the first time, *i.e.*, in 1932, that a farm of this type was scientifically investigated.
- Ø. 64a at Igaliko Fjord. The 9-room farm was fairly well-preserved; remains of an earlier building were found outside the northeast wall and in other places, but its function was not clarified. In addition to the usual rooms there also seems to have been a bath house (Vebek, 1943, p. 18; 1941).
- Ø. 73 in Vatnahverfi was the subject of a minor investigation made by G. Holm (1883, p. 125) and later by D. Bruun (1896, p. 396 and p. 414). Judging from their meager drawings, I would be most hesitant to describe it as a central farm, as Roussell (1941, p. 80) does. New and far more painstaking excavations should be made.
- Ø. 167 in Vatnahverfi is a very large ruin group that consists of two separate farm-complexes; the long-house was mentioned above. The preliminary report (Vebek, 1952 p. 112)<sup>94</sup> does not reveal whether the two farms were worked simultaneously. The central farm consists of 15 rooms, and the walls are excellently preserved.
- V. 8 has been clarified on the whole, despite a less satisfactory state of preservation; there is a total of 12 rooms.

The remains of a wall can be seen in the northeastern corner; although their presence has not been explained, there is some indication that the excavator did not grasp the original extent of the building (Roussell, 1941 p. 167, like V. 16 p. 162 and V. 35 p. 164).

- V. 16 in Kangersuneq Fjord is the smallest central farm excavated in the Western Settlement, and only a few finds were made there. The house consists of 11 small rooms, with the cowshed in the center. The quadratic block of houses has a total of 3 entrances.
- V. 35, with its 10 rooms, also belongs among the smaller farms. The front wall faces south, out towards the lake at Tungmeralik. The farm was presumably destroyed by fire. In spite of its limited size, the system of passages presents many problems, for it is almost labyrinthic
- <sup>94</sup> Fragments of two steatite crucifixes and several iron objects, *i.a.*, were found in the midden. A small find of great importance is a fragment of Rhenish stoneware, that regrettably has not yet been dated. The most remarkable of all the finds was, however, the skeleton of a Norseman that lay on the paving stones in the dwelling's passage, covered by earth and fallen stones.

in character; its dimensions are too elaborately developed in relation to the house itself.

As mentioned earlier, V. 52a in Ameragdla cannot be considered completely excavated, not only because there is an earlier long-house here (see above), but also because nothing has really been done about the southeastern corner of the site (Roussell, 1936. p. 61 et seq. The provisional excavation provided many finds, e.g., 4 fragments of Rhenish stoneware vessels, a ship's model, and ship's planks (!), the remains of a bed, etc. Unfortunately, it did not appear feasible to transport the ship's planks, the bed, and so forth to Copenhagen).

Nor can this farm be described as an inland farm, for it is situated only ca. 1 km distant from Ameragdla, which, it is true, is a large clay delta today, but undoubtedly was navigable in the Middle Ages, indeed, as late as the 1700's (Roussell, 1941, p. 15; Knuth, 1944, p. 94). 95

This thousand-branched estuary has isolated Austmannadalen and made access to it difficult, but in the Middle Ages there were at least 4 farms in the 40 km long valley. Two of these (V. 53 and V. 53a) more or less plunged into the river, whereas V. 53c and V. 53d proved to be among the most interesting farms that have been excavated. They are situated in the innermost part of the valley, V. 53d almost all the way up under the inland ice. Thanks to permafrost, these farms were eminently well-preserved, and there was an unusually large number of finds, not the least wooden artifacts (Roussell, 1941, p. 171–179).

V. 53c consists of 9 buildings, including a smithy. The central farm was a rather complicated construction, with a total of 13 rooms. Roussell believes that the house was not built at one and the same time, but is the result of a long development. Apart from rooms I and V, the whole stall/barn complex appears to be a later addition. Accordingly, rooms II, III, and IV, with the possible additions of VI and VII remain; therewith one has a long-house such as, for example, V. 51.

V. 53 d consists of 6 sites, but the main site (see fig. 12), which is situated on top of a hillock is, with its 23 rooms, the most extensive complex of buildings excavated to date. It is difficult to trace its history. The southern part, especially room XXI, presumably was wrecked by fire; the most numerous and well-preserved objects, for example, a wooden crucifix from about 1300 and the remains of wooden benches and panels, were found here. Roussell (1941, p. 171–190) believes that rooms XIV,

 $^{95}$  Ameragdla is not the only clayer fjord in the Western Settlement with ruin sites that tempt one to presume that navigational possibilities existed in historical time. Cp. at Ujaragssuit and at V. 16 in Kangersuneq. The same conditions can be seen here: a large, clayer plain overrun by a labyrinthic system of twisting rivers whose main source flows out through the ice cave in a dead glacier.

XV, and XVII are the earliest ones, since their walls do not stand upon midden layers, and he thinks that it can be assumed that the building originally was a passage-house.

V. 54 at Nipáitsoq in Ameragdla has only been the subject of a trial excavation in 1950, but this showed that it was a central farm that had burned down (Meldgaard, 1965, p. 90. Several Eskimo arrowheads were found on the site. Meldgaard has given me information verbally; this also applies to the undefined type V. 69 (see survey I)).

#### Conclusion

It is extremely difficult to place the development of the farms chronologically. The finds give but slight help in this connection. For example, the best dating materials are missing e.g. the pottery and even though there is an abundance of forms, it has not been possible to put the steatite vessels in almost the whole excavated area in any chronological order.

As was the case in Iceland to a certain extent, the Norse culture in Greenland was practically speaking self-sufficient, and as a result only a limited number of objects can definitely be identified as imports from Europe. Thus, the major part of the finds is of local origin, and the decorative art is so conservative that the early Romanesque forms hold their own throughout the Middle Ages.

Without taking too great a risk, one can assume that the earliest long-house type probably did not exist longer than at some point in the 1000's, because as long as more and better material is unavailable, every means of determining the typology chronologically is thereby relegated to guesswork. Furthermore, it should be pointed out that practically all of the buildings were excavated without consideration of stratigraphical observations, which in some cases has caused irreparable damage. The circumstance that a farm of the long-house type such as V. 51 was believed to have been worked along with the fully-developed central farm, e.g., V. 53d, shows what the problem is like at present.

Roussell, and later on Meldgaard, with the support of I.B.'s account of the fall of the Western Settlement, have believed in a terminus ante quem, namely, ca 1350. The central farm apparently reached its full development at this point, and confidence is placed in the geological investigations of the moors, which took place to an extremely limited extent. According to the results of these investigations the climate changed shortly before the middle of the 13th Century, and became drier and more continental; the temperature supposedly remained unaltered in the summer, but became lower in the winter (Iversen, 1934,

1935). This climatic change supposedly was responsible for the emergence of the central farm in the late 1200's.

I.B. is our sole source of information regarding the decline of the Western Settlement. But in my opinion this chapter is the very one that is most dubious (see above); consequently it should not be used for dating purposes. When the archaeological material someday becomes so copious and representative that it can be safely used, we may find out whether Ivar's account is accurate. For the time being it is therefore wise to rely exclusively on the testimony of the archaeological sources.

I shall comment below on some of the datable finds, as well as on what the animal bones have to tell us.

In brief, the conclusion reached by this examination of the development of the different types of farms is that a relative chronology cannot be drawn up on the basis of the material that has been brought to light to date, for it still is all too incomplete and meager.

### CHAPTER X

#### Pagan Relics

Presumably, practically all of the landnam folk (settlers) in Greenland were pagan. There is very little evidence of this as yet; probably the main reason is that such a limited number of the earliest farms has been investigated.

The inscription on the A side of the runic staff from Ø. 17a derives from Nordic mythology, and says: "a:sa:sa sa:is:asa:sat X bibrau:haitir mar:su:is:sitr:a:blau (num)" and, as mentioned above, is dated at ca.1000 (Moltke, 1961, p. 408). The English version is: In the sea, sea, sea is the place where the asa-gods are on their watch, Bibrau, she is called, the virgin who is sitting in the blue sky (or – perhaps better – vault of heaven).

A steatite fragment incised with a Thor's hammer was found at Herjolfsnes, and a similar piece (of a loom weight) bearing the same symbol was found in the cowshed at "The River Farm" at Brattahlid (Nørlund, 1924, p. 225; Nørlund & Stenberger, 1934, p. 91 and p. 131).

Ldn states that "Porkell (farsekr) var disiàòr i tune i Hvalsayiarf (iròi)" (Ldn 1958, p. 51, chap. 91 (S: chap. 93 and H: chap. 80)). True to tradition, the archaeologists have frequently ransacked the croft on  $\varnothing$ . 83. Roussell claims that he found Porkell's grave in ruin 15. This is a collection of large stones that make a small enclosure: 12 feet long by 4 feet wide. But unfortunately Roussell (1941, p. 94) gives no evidence of this having been a grave.

Although P. Nørlund did not investigate ruin 29 on the Brattahlid plain, he defined it as an enclosure or a pen. A small trial excavation that took place here in 1962 produced some charcoal, burned bones, and fragments of steatite. Perhaps this was a pagan Norse burial place, but more extensive excavation is needed in order to confirm this.

About 20 minutes by foot north of V. 51 Roussell found two small mounds of sand and large stones which he interprets as grave mounds. One was investigated in 1932 and resulted in his assuming that it is a small chamber constructed of stones. The other was excavated in 1937. It is very distinct, and at its base there is a circle of stones measuring 7 m in diameter. In the middle of the mound there is a chamber measuring



Fig. 13. The "Sandnes Grave". (From Roussell, 1941, fig. 68).

 $2.07 \times 0.47$  m, orientation SW-NE, built of fairly large, smooth-surfaced stones. Presumably the mound was covered by turf that erosion removed later on. Roussell maintains that the finds prove that it is not an Eskimo grave; these include 2 split reindeer bones, a piece of an iron nail, and three much eroded fragments of steatite. There were no remains of a skeleton, but the iron nail could indicate that the body lay in a wooden coffin. The shape of the grave itself seems to have parallels in Iceland (Roussell, 1941, p. 95). There should scarcely be any doubt that intensive investigation of the ground around the earliest farms might reveal a considerably larger number of graves from the pagan Viking Age.

### CHAPTER XI

#### The Churches

The testimony concerning the churches in Greenland that is contained in the written sources is, as already mentioned, very meager, and the sources actually are of no importance whatsoever to a study of the church architecture. A further argument is that the number of registered churches exceeds even that number which the Icelandic sources regard as maximum, and it is extremely likely that new ones will be found in the coming years. Until the summer of 1962 we did not have the slightest idea of what the perhaps earliest church plan was like. This was the one that was found at "Tjodhilde's church" with its accompanying churchyard (cp. my opposition to the interpretation of the church as Tjodhilde's above. The excavation of the church and the churchyard took place in 1962–65. Preliminary accounts by Krogh, 1965 and 1967 p. 19 et seq.).

This small church was strikingly situated on a raised beach above the fjord, beside the river on the Brattahlid plain, scarcely 200 m distant from "Eirik Rauða's Farm", and less than 150 m from "The River Farm" (See fig. 3 and fig. 14). Just west of the church there are the remains of a much effaced turf dike. It has not been determined whether this is a church dike or simply a croft dike, but judging from the placement of the graves, the churchyard must have been circular. The small church building was constructed of wood, stone, and turf, and only "strengur" turf; 25 layers were found, which indicates that the wall must have been at least 1.50 m high. The interior of the building measured 2 m × 3.5 m. In common with the earliest dwellings in Greenland, the church had slightly outward curving long-walls and straight gables. The roof did not stand on the turf wall, but was supported by 6 poles in pairs placed inside the church and on the walls of the wooden building that stood within the turf walls. Thus, this actually was a wooden church with protective walls of turf, yet constructed in such a way that the west gable, where the door was placed, was open, i.e., not covered by the turf wall. The floor was paved with red sandstone, and there were low benches along the north and south walls. An imprint of a plank 1 m away from the east gable permits

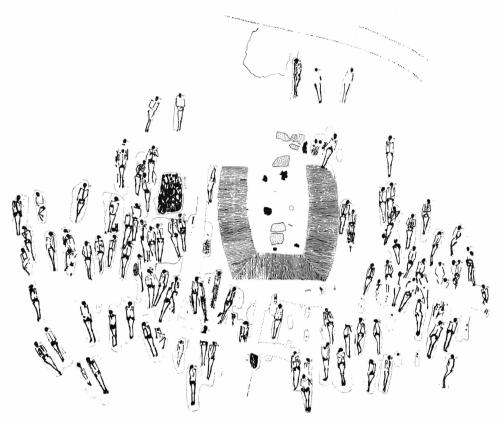


Fig. 14. Brattahlid. Eastern Settlement No. 29 a. "Tjodhilde's church". Looking west over church and churchyard. Sketch on the scale of appr. 1:170. The turf walls of the church are indicated by heavy shading. The floor flagstones are dotted and the postholes are black. (Knud J. Krogh del.).

the assumption that the chancel and the nave may have been separate. Finally, the find of a small wooden frame outside the east gable could indicate that there was a window there. The frame was made of both deciduous and conifer wood, held together by iron nails.

K. Krogh, who investigated the site, points out that this plan, which probably was typical in the northern countries in the Viking Age, seems to die out in the course of the 1000's. I have previously disagreed with his dating on the basis of the chronology in EsR, but it is somewhat more difficult to provide a better alternative, since great uncertainty prevails regarding the date when Christianity was introduced in Greenland, and because up until the present churches of the same period have not been excavated. The Icelandic turf churches come closest to it, but they cannot be traced further back than to the 17–1800's (Krogh, 1967).

p. 26). The burials in the churchyard indicate that the church functioned for only a brief number of years; a total of 144 individuals, 13 of them in a common grave, has been registered; since very few graves were disturbed by later burials, it seems likely that the church functioned through one or two generations, at the most. It must be assumed that similar churches were constructed around the large farms at the same time as this one.

The church ruins at Ø. 33 and Ø. 35 in Qordlortog, Ø. 64 at Inogutseg, Ø. 78 at Egaluit, and Ø. 162 at the mouth of Unartog Fiord (see also the map of the Eastern Settlement and the following survey of churches) have all been compared with "Tjodhilde's church". Modest dimensions and the circular dike are common to all of these ruins. The largest church is the one at Ø. 162: ca 6.00 × 9.00 m; the churchyard enclosure is ca 22 m in diameter. "Tjodhilde's" apparently had a diameter of ca 20 m. None of these churches has been investigated, and it would be going much too far to say anything about their age. Probably they are private churches, family churches, chapels, similar to the Icelandic ones; as such, they can have been constructed throughout the Norse period. In this connection one should once more recall the conservatism that prevailed in the Greenlandic society, and that was expressed by the preservation of very old stylistic elements (Vebek, 1966, p. 205) (Vebek identifies Ø. 162 with the "Vagar" of the church lists, but this happens only after a manipulation of the information contained in the sources. Until other evidence is available I shall also consider Ø. 162 as a private church or chapel).

Another plan has been observed in church buildings which have a separate chancel and an "open west gable". It has been thought that these must be stone churches with a wooden west gable. Yet, as Krogh (1965, 1967) has shown, it is more probable that they were wooden churches surrounded by a protective wall of stone and turf. (His theory

96 "The reason why the Icelandic turf churches have entered into architectural history as a special type of building is that they have not been viewed constructively. The turf houses are pure and simple wooden churches with a surrounding turf rampart. The turf walls are quite separate from the wooden building; a space of 30–40 cm between them is not unusual. Only the turf covering the roof is connected with the turf walls, and this connection is elastic."

<sup>97</sup> If a Christian law such as, e.g., that in Grácás existed in Greenland, both church and churchyard must have ceased to function before the following paragraph in the Christian law was ratified: "Kirkia hver scal standa i sama stað sem vigð er. Ef pat ma fyrir skriþum eþa vatna gangi, eþa eldi gangi, eþa ofviþri. eþa heroð eyþiat, or af dolum. eþa ut strondum. þatt er rett at fora kirkio ef þeir atburþir verþa þat er rett at fora kirkio ef byskop lofar." Furthermore, it is considered extremely important that no human bones are left behind in the abandoned churchyard. One was supposed to search for them in the same way that one looked for money. See Grácás op. cit. chap. 3 pp. 12–13.

is not based on excavations, but on the material available to date. M. Már Lárusson puts forth the same hypothesis in KLNM IX col. 636 et seq.). If this is the case, the absence of jambs of the chancel archway is also explainable.

Metrological investigations have demonstrated that the "Roman foot" (= 29.5 cm) was the unit of measurement employed. It was used all over Europe in the Romanesque period in marking out monumental buildings.

The shape of the churchyard dike seems to have been circular originally, but this can also be found in polygonal, rectangular, and trapezoid versions. In Greenland it has not yet been possible to fix any terminus post quem for the abandonment of this plan, but presumably it was introduced in the 1100's. None of the churches in this group can be said to have been adequately investigated; as will be seen below, the character of the object is primarily to blame for this.

Under the well-preserved rectangular church ruin at Brattahlid (see fig. 3 and fig. 22), Nørlund (Nørlund & Stenberger, 1934, p. 33 et seq.) found the remains of an earlier church beneath the western part of the north wall, where the foundations were not completely parallel with those of the new church. The preserved west corner of the foundation projects of the ca 1 m from the west wall, but gradually disappears again toward the east. All in all, it can be traced along a stretch of 5.3 m along the outer wall. The chancel was narrower than the nave. The entire length of the church did not exceed ca 12 m, and it is unsafe to say more than this about it. The remains of a circular dike were found in the southern part of the churchyard; its diameter can be estimated at ca 24 m.

During the excavation of the cathedral at Gardar (Nørlund & Roussell, 1929, p. 32. See also fig. 24 and 25) there was evidence of an earlier church of the same dimensions having existed on the same spot, for there were graves under the foundations of the earlier church under the south chapel. Furthermore, a Viking Age gold ring which is typical of the 10th and 11th centuries in Scandinavia was found here. It was found along with a similar bronze ring in disturbed layers which Nør-LUND maintains contained ruined graves, even though no bones were observed. The presence of burials under the east gable, the south wall of the south chapel, and the west wall of the north chapel, made the archaeologists aware of the existence of an earlier church. In addition, there were the remains of the church itself, which run N-S beneath the south wall of this cruciform church. Still another testimony is the presence of an earlier and much lower floor in the church, as well as the remains of a smaller chancel in that of the cruciform church. Remains of both nave and chancel accordingly were found, and can also be seen in the masonry of the later cathedral. The chancel was as wide as

that of the cruciform church, but was considerably shorter. The total outer length of the church was at least 17.00 m, with ca 12.50 m taken up by the nave and 4.50 m by the chancel. The present rectangular churchyard dike has the "Carolingian-Greek foot" (= 32.5 cm) as its unit of measurement, and must be considerably earlier, namely, from the Gothic period. No traces of the old dike have been observed.

At Ø. 105 (fig. 15) there is a small church that has been construed on the basis of information in I.B. as the Augustinian monks' church (more about this below). It has been the object of a few hours of excavation — mainly architectural surveys. The whole church is 11.75 m long; the nave is 8.20 m long and 8.85 m wide externally. The narrow chancel measures 7.40 m in width externally. There seems to have been a door facing away from the farm in the middle of the south wall. The church is situated in the eastern part of the churchyard, which is surrounded by an irregular hexagonal dike (Roussell, 1941, p. 107).

The largest church having this type of plan that has been excavated to date is the famous one at Herjolfsnes (Ikigait) Ø. 111 (Nørlund, 1924). As a result of the subsiding of the land, the whole southern part of the trapezoid churchyard plunged into the sea, and the southern part of the church has also suffered damage. The following measurements are all from the interior: Length: chancel: 3 m, nave: 11.50 m. Width: chancel: 4,30 m and nave 6.50 m. There was a doorway in the middle of the north wall. Remains of an earlier church were observed, and the burials under the chancel and in the west gable must be earlier than the present church. Although there were no indications that the chancel of the present church is a later addition – all corners between the chancel and the nave are regularly joined together – the nave has undoubtedly been extended westwards; this is revealed by changes in the foundations of the walls. Prior to its extension the nave had almost the same quadratic form as in Ø. 105.

The size of the church is difficult to understand, for the surrounding inhabited area is apparently very small. Some of the famous grave finds in the churchyard showed that the Greenlanders were in contact with Europe as late as about 1500 A.D.

The presumed Sandnes church (fig. 16) in the Western Settlement was, when it was investigated in 1930, only accessible at ebb tide, for both church and churchyard have sunk into the sea. Thus the excavation process involved unsurmountable difficulties, which also explains why the picture of it is rather fragmentary. As far as could be determined, the nave was 5 m wide inside. The walls are ca 1.80 m thick, but here the sill

98 In the summer of 1968 new excavations were planned on the site, for it appeared that the methods Nørlund used in 1921 do not entirely meet the demands of modern archaeology. It is considered necessary to check and re-check as much as possible.

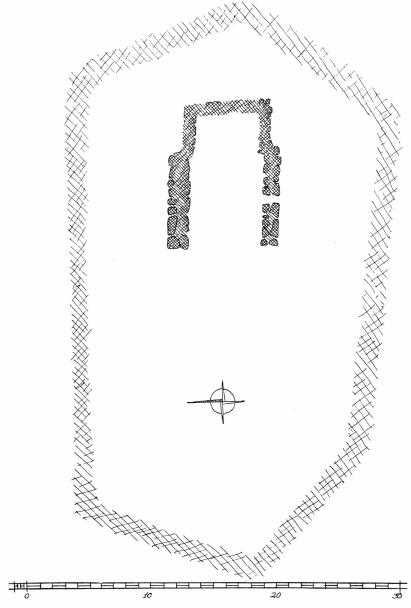


Fig. 15. Church and churchyard. Eastern Settlement No. 105. Plan 1:300. (From Roussell, 1941, fig. 74).

stones come into the question; the length is uncertain. The chancel measured 6.50 m in width and 5.20 m in length externally; the interior width is 3.25. Apparently the chancel is a later addition, as the unit of measurement used is the "Carolingian-Greek foot," but it should be

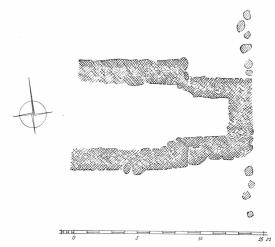


Fig. 16. The socalled Sandnes Church. Western Settlement No. 51. Plan 1:300. The church is now submerged by the sea. (From Roussell, 1936, fig. 14).

pointed out that the unit of measurement employed in the nave could not be determined (Roussell, 1936, pp. 14-31).

The shape of the churchyard dike could not be determined.

There is just as little evidence in support of the theory that this church is identical with the Icelandic church lists' "Sandnes church" as there is to enable its identification with I.B.'s "Stensnes cathedral". None of the finds can support any assumptions, not even the carved arm rests which, according to Roussell, were attached to a chair of a type that only could be used by high-ranking prelates. This is by no means correct; laymen have also been depicted sitting on this type of chair, e.g., on the Bayeux tapestry.

A plan which may have been introduced at the same time as the latest one, the rectangular plan, can be found in the church ruin in  $\emptyset$ . 66, (fig. 18 & 19) which is identified with the "Undir Höfda" mentioned in the sources (Roussell 1941. Published material about the church is inadequate. Roussell clearly did not know what to do about it; he dates it as "late Gothic?"). In common with the late rectangular church building, it does not have a separate chancel; the Carolingian-Greek foot also is used as a unit of measurement, and the foundations are constructed in the same way as those, cp., for example, at Brattahlid and the so-called Anavik. In addition, it retained old features such as the "open" west gable. Undir Höfda church must have been built in the last centuries of the settlement; it lies upon a ca 30 cm thick layer of shifting sand, and under this, again, there is a 7 cm thick layer of charcoal, which runs in under the foundations of the building. Three burials under the west gable moreover testify that the churchyard is older than the church.

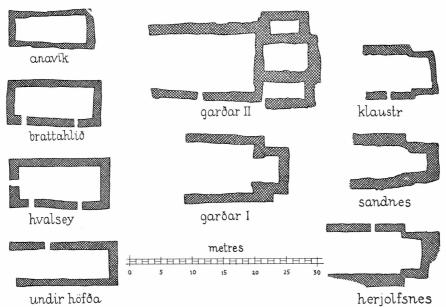


Fig. 17. Plans of some of the churches in Greenland. Plan 1:600. (From Roussell, 1941, fig. 75).

Considering Greenlandic conditions, the church is well-preserved. For example, one of the walls stands at a height of 2.15 m above the original floor level; it is 1.30 m thick and leans ca 28 cm inwards. The building materials are selected stones, carefully placed in courses. There is a door in the north wall. Unfortunately, despite several investigations, it is impossible to arrive at a final picture of the history of this church. Accordingly, there is no possibility of determining the unit of measurement applicable to the width of the building, which is ca. 6.00 m. The length has been noted as ca 15.95-17.15 m, which according to Roussell corresponds to 50 Carolingian-Greek feet. While excavating outside the east gable of the church Clemmensen (1911, p. 344) found a lump of melted glass, and G. Holm (1883, p. 139) made a similar find inside the church. If this is compared with the layer of charcoal underneath the church, as well as the three above-mentioned graves, there is, in my opinion, much in favor of there having been an earlier church at the site, perhaps with glass windows which melted when the church burned.

Roussell believed that the Undir Höfda church was a regular stone church. I believe, however, *i.a.*, because of the open west gable, that the thick stone walls possibly should be viewed as protective walls around a wooden church as those described above.

The churchyard is surrounded by a trapezoid dike. Only small parts of the churchyard have been investigated, even though the

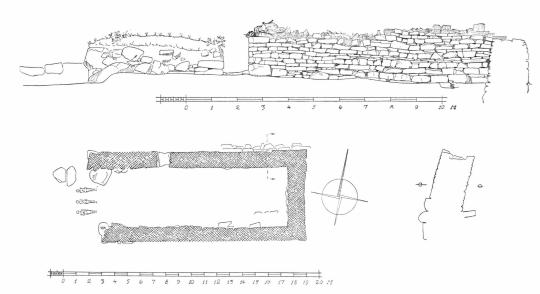


Fig. 18. Undir Höfda Church, Eastern Settlement No. 66. The church in plan 1:300. Section 1:150. (From Roussell, 1941, fig. 69).

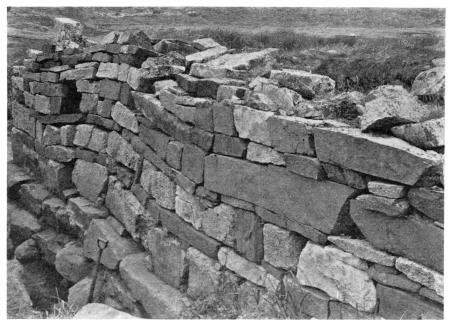


Fig. 19. Details of north wall of the church, showing the thick foundation and the wavy courses. Undir Höfda. Eastern Settlement No. 66. (From Roussell, 1941, fig. 70).

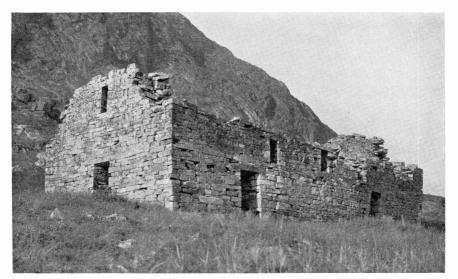


Fig. 20. Hvalsey church, from the southwest. Eastern Settlement No. 83. (From Roussell, 1941, fig. 10).

skeletons were well-preserved and remains of coffins and clothing were found!

Two church sites that have not yet been excavated seem to have the same plan as Undir Höfda; these are the presumed Dyrnes and Undir Solarfjöllum churches, situated, respectively, at  $\varnothing$ . 18 at Narssaq, and at  $\varnothing$ . 23 at Sitdlisit in Tunugdliarfik. The exterior measurements of Dyrnes are ca 15 m  $\times$ 8.75 m. Undir Solarfjöllum measures 10 m  $\times$ 5–6 m, and the supposed protective walls are constructed of large, flat Igaliko sandstones. Both churches have collapsed to a considerable extent therefore the interpretation of the shape of the ruins must be regarded with care! The churchyards are rectangular, the latter measuring  $20\,\text{m}\times18$ –19 m (Nørlund & Stenberger, 1934, chap. I; Vebæk, 1966, 1968).

The convent church also belongs in this group, and will be discussed separately below.

The earliest types of plans are regular stone churches, whose plan is a simple rectangle. They are twice as long as they are wide, and in their construction they also seem to follow the architectural system: "ad quadratum." The architecture of these churches is under Norwegian influence.

Alone by virtue of its good state of preservation, Hvalsey church in  $\emptyset$ . 83 is Greenland's most impressive church ruin (see fig. 20 & fig. 21). (Clemmensen, 1911; Roussell, 1941 chap. III). The church is 16.10 m long measured on the outside, and ca 8.00 m wide. The inside measures 13.00 m  $\times 5.50$  m. The height of the side walls is 3.70 m. The west gable, that has a doorway and a square window, is 5.70 m high. The east gable,

where there is a segmentally arched window, attains a height of 5.80 m at its highest point. From all indications the church had a pitched roof. There are two doors and four windows in the south wall, and finds of glass fragments could indicate that the windows had glass panes.

Roussell has demonstrated that the church is extraordinarily like a number of Norwegian churches, especially Eidfjord church in Ulvik parish, Hordafylke, which is believed to have been built shortly after 1300 A.D. This is true of the size, as well as the placement of the priest's door and the windows. The segmentally arched window is representative of an arched window which first became common in Norway after 1300. Accordingly, a lower limit is set with respect to the date when Hvalsey church was built; it is impossible to come closer at the present moment. But it should be pointed out in this connection that the church floor has not yet been archaeologically investigated in its whole extent; this is also true of the rectangular churchyard, E-W: 32.20 m, N-S: 25.75 m. An important thing should be mentioned: mortar was used for joining purposes, which has only been observed at one other place before, namely, in a small fragment of a building alongside the cathedral in Gardar (Nørlund & Roussell, 1929, p. 47). Presumably mussel shells were burned in order to produce mortar.

Brattahlid church (see fig. 22) is situated on flat, sloping ground, a raised beach ridge which falls eastwards toward the fjord. The cathedral's placement is almost the same. (Nørlund conjectured that the earlier church was identical with "Tjodhilde's church," and dated it at ca. 1000). The graves investigated in the churchyard were poorly preserved; it apparently was subjected to intensive use. Ten gravestones were found, almost all of them close by the church.

The measurements of the church are: externally: length 15 m, width: 7.50 m in the east end and 7.30 m in the west end. Interior length: 12.50 m-12.70 m, and width: 5 m in the east end and 4.50 in the west end.

There are two doors in the south wall. There were no finds that could contribute to a more exact dating of the church; the datable finds all indicate the 12th Century, and are therefore more probably related to the earlier church on the site. P. Nørlund dated the rectangular church building at shortly after 1100, which is of course unacceptable. More likely it is contemporaneous with Hvalsey church (cf. Roussell).

Curiously enough, Brattahlid church is not one of the largest churches in the Eastern Settlement, the situation of the place taken into consideration. After Gardar it is exceeded in size by, *i.a.*, Herjolfsnes, Hvalsey, the Convent church, Undir Höfda, Dyrnes, and others.

The churchyard is surrounded by an unusually well-preserved stone dike, whose average thickness is 1.50–2 m; its form is almost quadratic, ca  $25\times25$  m.

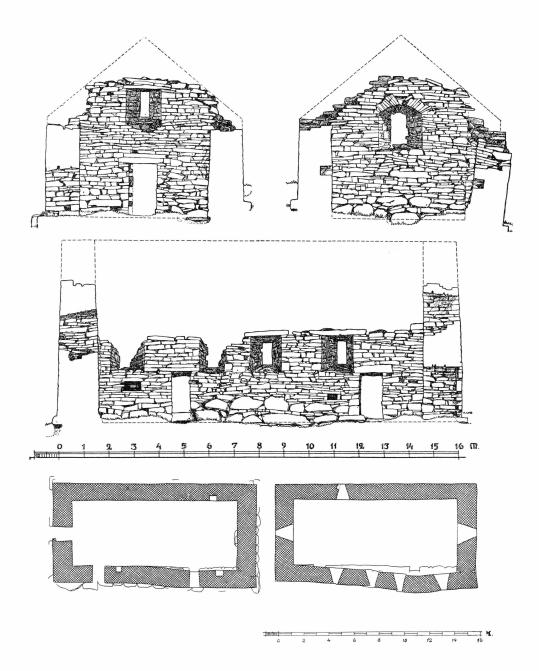


Fig. 21. Hvalsey Church. Eastern Settlement No. 83. The church plans for ground and upper levels, 1:300. Longitudinal section looking towards the south wall, and cross sections looking towards the ends, 1:150. (From Roussell, 1941, fig. 80).

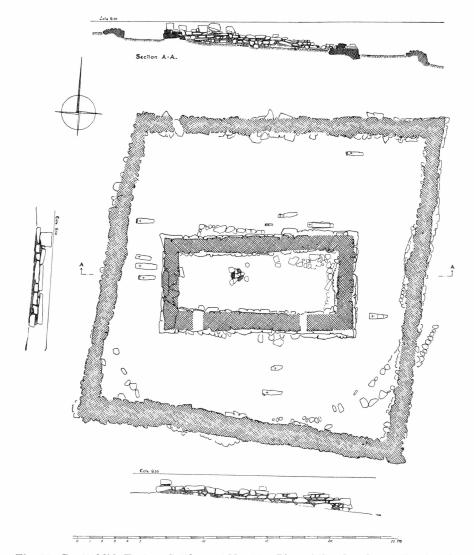


Fig. 22. Brattahlid. Eastern Settlement No. 29 a. Plan of the church and the church-yard 1:300. The gravestones are marked with small crosses. Remains of the earlier church can be observed. This church was possibly surrounded by a circular dike.

(From Nørlund & Stenberger, 1934, fig. 12).

The presumed Anavik church (fig. 23) in the Western Settlement (Roussell, 1941, p. 105) is located in the eastern part of the croft, surrounded by a trapezoid stone churchyard dike, whose largest dimensions are  $28 \times 22$  m. (The churchyard has not been excavated apart from a small trial excavation outside the southeast corner of the church, here were very promising finds as well as well-preserved corpses with grave-clothings, thanks to the permafrost).

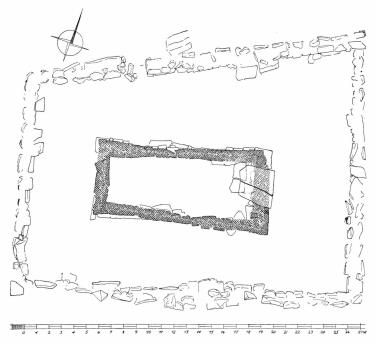


Fig. 23. Western Settlement No. 7. Plan of the church (Anavik?), 1:300. (From ROUSSELL, 1941, fig. 73).

The church measures ca.  $14 \times 6.50$  m externally. It was not possible to find doorways. The walls are very thin, from 90–120 cm, and as always constructed of rough stones placed in clay. The archaeological investigation of the church apparently was very limited. This church must also be contemporaneous with Hvalsey and Brattahlid, but is smaller than these.

#### The Cathedral in Gardar

The earliest cathedral building has already been described.

The latest cathedral building was cruciform (Nørlund & Roussell, 1929, pp. 32–75). The wide nave was connected with a narrower chancel, that again was flanked by two small chapels which formed the arms of a cross. The nave is ca 2 m wider in its eastern than in its western part. The exterior measurements are: Length of nave: ca 18 m. West gable: 11.30 m. Width of the east end of the nave: 13.10 m. Total length of the church: 27.10 m. Greatest width: 15.80 m. The east gable of the chancel: 7.70 m. The exterior length of the chapels: 7.80 m. Width: 3.90 m. The south wall of the nave has not been preserved in its entirety, and the west gable is "open". The walls are hollow, and very sandy, blue clay was used as a joining material. In the south wall a large flat threshold

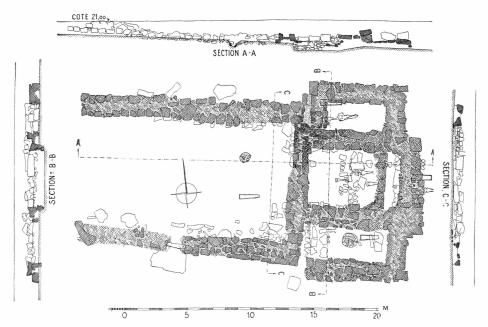


Fig. 24. Eastern Settlement No. 47 - Gardar. Groundplan and sections of the cathedral, 1:300. (From Nørlund & Roussell, 1929, fig. 11).

stone indicates that there was a door. At the same spot a piece of profiled steatite was found; presumably this was a part of the doorframe. A fragment of a little column of the same material was excavated in another place. A single piece of colored window glass could indicate the existence of windowpanes.

In the south chapel, which is interpreted as the sacristy, and in the northeastern corner of the nave small, pit-shaped fireplaces were found. In the north chapel there was a bishop's grave; a bishop's crosier with its crook carved out of walrus ivory lay across the body, which as a result of later burials had lost its head and its right foot. Nørlund (1929, p. 65) advances the hypothesis that the foot supposedly fell off as a result of gangrene, but the bones have never been examined scientifically in situ, wherefore I presume that the foot suffered the same fate as the skull. The crosier itself is made of ash and has an iron ferrule. Nørlund dates it at ca 1200. The right hand bore a bishop's ring of gold with a stone; the type supposedly is early Gothic.

Nørlund believes that the bishop in the grave is identifiable with Jon Arnasson, called Smyrill, who presumably died in Greenland in 1209.

A niche in the east wall of the nave indicates the presence of side altars.

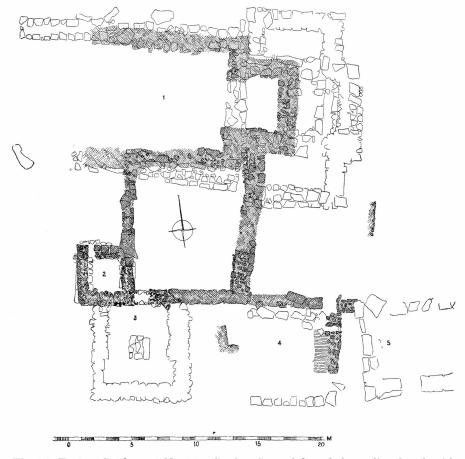


Fig. 25. Eastern Settlement No. 47 – Gardar. Groundplan of the earlier church with adjoining buildings. The hatched portions indicate the earlier buildings, while later additions and rebuilt portions are merely outlined (1:300). (From Nørlund & Roussell, 1929, fig. 18).

The rectangular churchyard measures N-S ca 32.50 m and E-W ca 48.80 m. Only a few investigations have been made here. The unit of measurement is the Carolingian-Greek foot, as in the chancel and the chapels. The Roman foot may have been used in the nave.

According to P. Nørlund, the cruciform church was built in the latter half of the 12th Century, or in the early part of the 13th Century. The dating is based, *i.a.*, on the bishop's grave in the north chapel. He further believes that the ground plan of the cruciform church appears to support this dating, in that he points out that the church has parallels with, among others, Lysekloster's church, whose construction began in 1146; it cannot, however, be compared with cathedrals in the rest of Scandinavia. Roussell (1941, p. 129 et seq.) also accepts this early

dating, and this despite that he maintains elsewhere that one first transfers to using the Carolingian-Greek foot as a unit of measurement in Norway after the first quarter of the 13th Century. It is scarcely likely that this was introduced in Greenland so early; more probably this took place as late as the second half of the 13th Century. But under all circumstances one cannot make use of Jon Smyrill in justifying this dating, for, as we know, he died in 1209.

The open west gable could indicate that in any case the walls of the nave should be viewed as protective walls around a wooden church. Moreover, there is the remarkable feature that this is the only church in Greenland that has a very thick wall dividing it from the chancel. Could this, perchance, originally have been a church of the Undir Höfda type, to which chancel and chapels were added later?

In about 1500 a wall constructed of stones and turf was erected around the wooden cathedral in Skálholt (KLNM IX col. 638); even though this may have occurred a bit later, it shows that this technique also was used with respect to cathedrals.

Many problems that have yet to be solved surround the cathedral in Gardar; it is to be hoped that new investigations soon will be undertaken here, before modern constructions have completely molested this unique construction.

### The Convent and the Monastery

I.B., as the sole topographical source, mentions two cloisters in the Eastern Settlement, but a diploma dated 1308 also mentions them (see above). In the account of Ketilsfjord (Tasermiut?) following Petursvík church it is stated (I.B. 1930, p. 23 et seq.): End fra thenne bij ligger en stuort closter, som canonice regulares er udj som vigt er til Sanct Oluff och Sanctum Augustinum, closteret eijer alt ind i botnen och alt ud på then anden side. And it continues: Nest Kiedeltzfiord ligger Rampnessfjord och langt ind udj then fiord ligger ett søster closter ordinis Sancti Benedicti, dit closter eger alt ind in botnen och ud fra Vage kirche . . . ind i fiordenn ere mange holme, och closteret æger alle sammen helten met domkirckenn, udj i disse holme er megit varmpt vand som om vintherne er så het ath ingen må komme nær . . . etc.

The identification of Rampness Fjord with the hot springs was easy, for Ûnartoq Fjord is the only fjord in which there is an island with such springs, and it is from these that the fjord has its Eskimo name. (Vebæk, 1965, p. 47; 1966, p. 208 states that there must be a mistake by I. B., but I cannot follow his interpretation).

In 1932 P. Nørlund showed where the convent was situated, and in 1945-46 and in 1948 C. L. Vebæk carried out a series of excavations of

the church, part of the churchyard, and most of the buildings belonging to the convent (Vebæk, 1953a; KLNM VIII cols. 538–39).

On the eastern part of the Narssarssuaq plain, where the top soil is very rich and the vegetation (grass) lush, there is a total of 26 ruins: Ø. 149. Most of them are located within the low, but almost everywhere distinct dike that once surrounded the croft. The numerous buildings can readily be classified as belonging to 3 main groups: church and churchyard, the dwelling, and the outhouses.

The plan of the church is rectangular, ca  $15\times9\,\mathrm{m}$ , and is the Undir Höfda type. The presumed protective walls were constructed of rough stones, both large and small. There were ca 20 burials in the church. The churchyard was surrounded by a four-sided stone dike, ca  $29\times24\,\mathrm{m}$ ; here were found, *i.a.*, several mass burials.

Directly east of the church there was a large site, ca 80 m long and 20–25 m wide. This involves the remains of several houses, in part a couple of small outhouses and in part a large long-house (see above) with many rooms – undoubtedly the convent building proper. Only the floors and the foundation stone and some of the earliest layers of the course are preserved. The building has had an imposing front wall with tremendous blocks of stone; Vebek maintains that it is entirely different from other dwellings. Yet the ground plan cannot be certainly determined, for the site was considerably collapsed and indistinct.

While there thus seems to be no reason to object to the identification of the convent with  $\emptyset$ . 149, I seriously question that  $\emptyset$ . 105 is identical with the monastery. F. Jónsson (1899) called attention to this locality in Tasermiut at Tasermiutsiaq (map I). In 1926 Nørlund and Roussell found a small church whose outline they measured (see above). (Roussell, 1941, pp. 48–51 and 106–07). The ruin group comprises a total of 8 sites. In addition to the church (1) there is a small dwelling (2) north of it, and alongside of this a very small building (3). Besides there is a small outhouse (4), a fairly large storehouse (5), a good-sized pen (6) and two smaller ones (7–8).

The farm actually consists of only four modest buildings; therefore in my opinion it is a bit disingenuous to identify this small complex with en stuort closter, which supposedly owned everything on the other side of the fjord, that is to say, in any case ten farms. There is very little to prove that Ø. 105 is a monastery, this must be looked for elsewhere. The church in Ø. 105 may be identical with one of the unidentified churches which Fltb mentions as being in Ketilsfjord: Vatsdalr and Vík. I.B. also mentions two churches in addition to the monastery: Arós and Petursvík. C. L. Vebæk (1966, p. 206 et seq.) believes that the Vatsdal church is identical with Petursvík, and Arós with Vík, relying, as he does, on I.B.'s topographical account.

For reasons given above I do not consider it necessary to elaborate further upon Vebæk's theories about this fjord's topography (see survey of churches). In Vebæk's opinion Arós/Vík should be looked for at Tasiussaq. The church may have sunk into the fjord; remains of a churchbell were found on the beach. If this is the case, there could be a possibility of observing the church at ebb tide!

P. Nørlund claimed that he found the Vatsdal church in Ø. 140 in 1926, Qáqasiaq beside the large lake, Taserssuaq. In my opinion, however, he does not produce at all convincingly any evidence to the effect that a church could have been situated here. The ruin itself is in such a state of collapse and so indistinct that it cannot give any reliable guidance. A small trial trench showed that in some places the earth had been dug to a depth of 1 m. He construes this as the churchyard, even though no skeletal parts whatsoever have been found here (Nørlund, 1928, p. 46 et seq.).

No doubt it should be superfluous to point out that new investigations are needed to a high degree before it is permissible to assume that there was a church on  $\emptyset$ . 140.

#### Conclusion

This examination of the archaeological materials pertaining to the churches shows that apart from "Tjodhilde's church", new investigations of practically speaking all of the churches excavated to date would be desirable, for the results obtained so far are based on very meager material. In recognition of this, new excavations were also started in Herjolfsnes in the summer of 1968, and new ones will follow in Gardar.

It would therefore not be correct to advance any final conclusions at this point, to say nothing at all about datings; yet the material does provide some principal guidelines, despite everything.

Thus, it is certain that the architecture of the earliest stone churches has prototypes in Norway, and that the incentives must have come from here. But the situation is different with respect to the earlier churches that as said above probably have been wooden churches surrounded by protective walls of turf and/or stone. These types have not yet been found in Norway. The material in Iceland is very meager, yet by comparing it with the written sources one finds that the earliest type of plan also existed here. (See KLNM IX col. 636 et seq. Thus the turf churches in Iceland are not a sign of later days' poverty, as Roussell has claimed). Thus it seems obvious to assume that models were obtained from Iceland in the earlier middle ages, whereas at a later date the close connection with Norway gave this country's building customs prominence – that is, in regard to churches – particularly since stone

churches existed in Iceland in but two cases, and none of these was completed in the middle ages.

The strong Celtic influence, *i.a.*, in grave crosses, etc., scarcely indicates a direct connection with the West Norwegian colonization of the Atlantic Islands; more probably these features came to Greenland via Norway and Iceland, and, because of the strong conservatism in Greenlandic art, they were retained long after they had gone out of use in the other Nordic areas.

# CHAPTER XII

## Comments on the Finds and the Zoological Materials

It has been pointed out frequently above that finds are not particularly helpful to the dating of ruin complexes. Some scholars have even gone so far as to belittle the importance of everything apart from imported articles (Roussell, 1941, p. 243, et seq.). But there are many ways of constructing a chronology on the basis of the finds, provided that one keeps in mind certain factors, such as, for example, the stratigraphy of the cultural layers.

With the gradual placement of the finds in the proper layers it should be possible to arrive at a form of typology, based, for example, on the ornamentation of the steatite vessels, and many other things. And it may even appear that the outside influences are far greater than one imagines.

To date the archaeologists have shown partiality for only a very few things, for example, fragments of Rhenish stoneware, but since in most cases these were not properly excavated they are of little use beyond testifying that *e.g.* 15th Century stoneware was found at the foundations of the hall at Herjolfsnes or in front of the west wall at Hvalsev church.

Finds of bronze import articles are extremely few and are even more difficult to date, as they are not ornamented. Yet the moulds found at Gardar indicate that the smelting of metal had been mastered – whether this was in the form of imported bars or simply old things that were re-smelted (Nørlund, 1929, p. 144 et seq.).

It has is been proved that iron was extracted in several places in the Eastern as well as the Western Settlement, (N. Nielsen, 1929, 1936 and MoG. 88,1, p. 156), and one dares maintain that this must have been a significant supplement to a very uncertain importation of iron.

E. Moltke has called attention to the peculiar deviations seen in the runes in Greenland, deviations that become more marked as the middle ages progress (Moltke, 1936, p. 221 et seq. and 1961).

Finally, it should be noted that from now on it will be necessary to cooperate with the natural sciences to a far greater extent than previously, first and foremost with bog geologists and to a lesser degree with the glaciologists. Climatic deterioration has been discussed for decades, but no final solution of this problem has been found as yet.

## The Zoological Materials

The majority of the animal bones that have been scientifically investigated (Degerbøl, 1929, 1936, 1941, and 1943) share a common fate with the other finds, *i.e.*, insufficient consideration has been given to the layers in which they were found – or, in other words, one cannot safely determine the period of the settlement to which they should be assigned.

As early as in 1927 P. Nørlund (1927, p. 391) urged that the large middens at the farms should be investigated stratigraphically, but neither he nor his successors acted upon this recommendation.

Much too often we have given in to the argument that since the middens have been ransacked to such an extent nothing satisfactory could be achieved by an investigation. And yet the first prerequisite should be an attempt to carry out a study with the aid of modern means that now are at the archaeologists' disposal. Best of all, of course, would be to start with the farms that were abandoned at an already early date; here there should be ample opportunity to determine changes in the layers of refuse heaps, and, in the first place, with respect to the zoological materials.

Accordingly, only general comments can be made concerning the bones that have been excavated to date; for the time being these must mainly apply to the later part of the settlement. In this connection it should be pointed out that nothing concerning this category has been published since 1945!

Generally speaking, ca  $^{3}/_{4}$  of the investigated bones are representative of game animals; thus only  $^{1}/_{4}$  of domestic animals. This is actually most surprising, considering the large farm complexes. It is even more surprising, however, that the same situation also applies to those farms that are located far away from the sea, for example in Austmannadalen in the Western Settlement.

Among the game animals the Greenland seal (the harp seal) and reindeer dominate, but in addition there are the bearded seal, the ringed seal, (*Phoca hispida*), the hooded seal, the polar hare, the arctic fox, and various species of fish and birds, whale, walrus, and the polar bear.

Most frequently the walrus is only represented by its cranium, with the costly tusks removed; no doubt the animal was flensed at the hunting grounds in the north and only the most valuable parts were brought home. This also applies to the polar bear, whose skin was primarily valuable.

The domestic animals are represented by dogs, a race of small horses, pigs, sheep, goats, and oxen. And there were even two races af cattle: the small cow, which we also know existed in medieval Denmark, is the most numerous. But the other race, which, *i.a.*, was found at Gardar, is just as big, or even bigger, than our present-day Jersey cow. But M. Degerbøl thinks that it may have been a very large bull.

As mentioned earlier, the numerous and often large barns, particularly those at Gardar, bear witness of animal husbandry on a considerable scale, and one wonders often how they managed to get fodder, especially hay, in the winter for the large number of animals. We now have one answer to this question, for in recent years very effective irrigation systems and damming of lakes and rivers have been found at Gardar, Brattahlid, and at Ø. 2, Tingimiut in N. Sermilik (Meldgaard, 1965, pp. 40–41).

A brief description of the installation at Ø. 2 follows.

At the end of the valley and a short distance up on the mountain a river runs through a small lake. Here a dam blocked the outflow of the river, together with a piece of the beach that was elevated by means of a dike made of stones and turf. The water level could thereby be raised by a meter or more, and the water led into a 730 m long canal which, with a slight drop, could be directed down along the south side of the valley. Smaller side dikes crossed the croft at intervals, and when desirable, the water could be led across the meadows. Here, at Ø. 2, it was possible to irrigate up to 12 ha artificially. In the 14th Century this became especially important to the hay fields, for the climate changed and the summers grew drier, and this influenced the growth of grass in the settlements (IVERSEN, 1935). The system of artificial irrigation may stem from this period.

# CONCLUSION OF THE ENTIRE INVESTIGATION

As each of the above sections ended with its own conclusion, to avoid repetition only the most significant results of this investigation will be pointed out here.

The evidence provided by the Papal bulls, by GH, Islb and HN is so brief and gives so little information that it only gives an exceedingly fragmentary picture of the settlement of Norse Greenland. Considering what is available in Ldn and Isls, as well as in a considerable part of the purely topographical sources, one is in an even poorer position. As far as Isls is concerned, the conclusion is that this group of sources actually is quite unusable for an historian, and should therefore not be employed in the way used to date, in an effort to shed light on the Norse settlements.

Thus a common trait of the written sources is that it gives an extremely unsatisfactory picture of the Norse society – not the least because it is based, practically speaking, on reports that cannot be characterized as primary sources – none seems to have been written by persons who had been in Greenland.

On the other hand, the picture that can be drawn on the basis of the testimony of the archaeological sources is far more richly faceted. Unfortunately, the ruin complexes that have been investigated to date represent but an insignificant part of the whole archaeological material - this is constantly added to by finds of new ruin groups - and, at that, the main emphasis is placed on the settlement of a later date. Therefore, for example, the classification of the three stages of development of the long-house should not be accepted as definitive, as the basic materials are meager, and are, as far as many of them are concerned, very unsatisfactorily investigated; this applies, moreover, to all of the excavated ruins. For this reason it would be particularly desirable if supplementary investigations of these could be made, with consideration being given to the difficult accessibility of the objects and with all the modern methods of excavation being employed. Speedy action is needed here, for as a result of the great population expansion and the expansion of sheep raising several ruins are on the verge of collapse.

As far as it goes, this account leads to a negative result. At this point it therefore is inopportune to describe the Norse Settlement, as we are in fact only on the brink of the scientific exploration of this fantastically abundant material.

Since until now we have primarily concerned ourselves with the settlements of the later centuries, at first glance the current picture of medieval Greenland is one of a static society; but this gives a very distorted view of the real situation.

Conditions of life in Greenland at the start of the colonization seem by no means poorer than, for example, those that prevailed in Iceland. In a few respects they were even better, for example, as far as hunting and the steatite deposits are concerned. In time, outside influences had reached the Greenlandic society, and these were united with that which was most favorable for Greenland. While the worldly architecture — the farm complexes — is developed by the Greenlanders into something unique to Greenland, the ecclesiastical architecture — the churches — showed a rapid reaction to changes out in Europe; no doubt the ecclesiastical emissaries who were still being sent out from the Archbishopric in Norway were the primary intermediaries in this respect.

But in studying these relics one encounters one of the greatest problems with which research work in this field has been faced to date, namely, that of determining the development chronologically. In order to make this possible in the future it will, as mentioned above, be necessary to make use of other supporting sciences; in addition, there should be a far more painstaking investigation of the stratigraphy, the finds and their possible stylistic development, taking into consideration this remote society's inclination to conservatism.

The most positive result of this investigation accordingly is that to obtain the most reliable and the clearest picture of the Norse settlement of Greenland one should almost exclusively use as one's basis the testimony that the archaeological material has provided and, not the least, will provide in the future. By means of renewed and careful scrutiny and with very critical testing of a few written sources such as, e.g., "Konungs Skuggsjá" and I.B., some additional pages can be added.

Even though the archaeological material employed only represents a small percent of the whole, it is possible already now to sense the existence of a society in full development without any signs of notable or disturbing stagnation, which makes the question of the settlement's sudden cessation even more incomprehensible.

The reasons why the settlements vanished have not been discussed here; I have simply pointed out that apart from a very doubtful piece of information in I.B., nothing has as yet been capable of confirming the theory that the Western Settlement should have been abandoned about 1360, and therefore I have tried to show how mistaken it has been to use this date as the uppermost limit of the settlement's existence.

If it should nevertheless turn out that the two settlements ceased to exist at different dates, it would also be strange if the reasons for their downfall could have been the same over an interval of ca 150 years; perhaps, therefore, it would be most correct to discuss the decline of the Western Settlement and that of the Eastern Settlement separately.

# APPENDIX TO ISLENDINGABÓK

# Possible Connection between GH and Islb

In the opinion of Ó. Einarsdottir, it is not improbable that parts of GH were well-known in Iceland as early as in Sæmund's and Ari's time. Islb contains a chronological error regarding the date of Pope Leo IX's death, and this mistake seems to occur in GH (the manuscripts state Leo VII, which must be due to a faulty transcription, for example, "Kristni saga" records this place verbatim and states Leo IX).

The erroneous information about the identity of the Pope in 1056 is repeated in "Kristni saga", "Hungrvaka", and the Icelandic annals (Einarsdottir, 1964, p. 23).

According to B. Sigfusson, Adam's and Ari's misconception of the date of Leo IX's death indicates that there is a connection between GH and Islb (Ellehøj, 1965 p. 66). Adam states that Pope Leo died in the same year as Emperor Henry, and that these deaths occurred during Archbishop Adalbert's twelfth year of office (Schmeidler, 1918, p. 176). But neither of these statements is correct. Leo IX died on 19th April 1054, Henry on 5th October 1056. Adalbert was ordained as Archbishop in 1043 (May?) (Schmeidler, 1918, p. 142 note 4 and p. 176 notes 1 and 2). Since Adam, equally erroneously, had reported shortly before this that the synod in Mainz (1049) took place in 1051, which was the Archbishop's 7th year of office, adherence to GH is enough to make us realize that Adalbert's 12th year of office must have been 1056 (determined by Einarsdottir, 1964, p. 22 et seq.).

And now Islb (1952, p. 26) reports that Leo was Pope when Isleifr Gizurarson was ordained as a bishop, and, moreover, states that Isleifr was a bishop throughout 24 years and died on a Sunday, 6 nights after Peter and Paul's mass (29 June), 80 years after Olav Tryggvason's fall, according to Ari's chronology in 1080.99

This indicates that Ari assigned Isleif's ordination to 1056, and if we rely upon GH, it is easy to explain why he stated that Leo IX was Pope at this moment.

<sup>99</sup> Ó. EINARSDOTTIR, 1079, according to her own investigations of ARI'S New Year on the basis of Bede's chronology. See p. 70 et seq. and p. 77 et seq. This will not be discussed in further detail here.

The Year 1000. After having shown that Bede, and after him, Ari, assumed that the turn of the year, New Year's took place on either the 1st or the 24th September, Ó. Einarsdottir (1964, p. 70 et seq.) revises 870 and 1000 to 869 and 999, respectively, in accordance with our calendar.<sup>100</sup>

According to Islb, Olav Tryggvason fell in the same summer in which the Icelandic Alting ratified a law concerning the introduction of Christianity. The date that Ari gives in this connection is definitely related to Olav Tryggvason's fall, whereas the introduction of Christianity can only be dated relatively to this event.

S. Ellehøj (1965, p. 78 et seq.) is of the opinion that this year — 1000 — must also derive from a written source, and that only one can come into the question, i.e., GH, for in all of the surviving literature before Ari Adam is the only one to mention Olav's fall in Book 2, chap. 40 (Schmeidler, 1918, p. 100), and in chap 42 he gives a date that can be interpreted as valid with respect to Olav Tryggvason's death: Interea millesimus ab incarnatione Domini annus feliciter impletus est, et hic est annus archchiepiscopi XII us (Namely, Archbishop Libentius (988–1013)).<sup>101</sup>

AKSEL E. CHRISTENSEN (in his lecture delivered 12th April 1967, at the University of Copenhagen) has advanced the hypothesis thatARI may have become familiar with a GH text in Lund. This supposedly was the now lost "Sorømanuscript", with which the author of the "Roskilde Chronicle" as well as the scribe of the "Lund Annals" were familiar. There are weak testimonies to the effect that this manuscript could have been kept in Roskilde (see below). The "Sorømanuscript" must have been in Lund about 1140, but it is likely that it also was there in Archbishop ASSER's period.

Anders Sørensen Vedel used this manuscript for his edition of Adam af Bremen. His chapters are divided in another manner; thus, the above-mentioned chap. 40 in B. 2 is called chap. 29, and in addition this chapter comprises chap. 40, chap. 41, and the above-mentioned quotation from chap. 42. In this way the year 1000 is connected with

100 Ibidem p. 122. Ó. Einarsdottir writes that at present it is scarcely possible to determine to what extent Ari's dating of the introduction of Christianity is correct. There is some basis in the law-speakers' list in Islb. Ari transmits the major part of his material with the aid of the law-speakers' periods of office. Porgeir Porkelsson was the law-speaker when the Alting ratified the introduction of Christianity, and since, according to Ari, his period of office was from 985 to 1001, the decision must have been made at the latest in the summer of 1001.

<sup>101</sup> Translation from the Latin: "In the meantime the thousandth year since the incarnation of our Lord was happily completed and this was the Archbishop's twelfth year...".

OLAV TRYGGVASON'S last battle and his fall, and with Sven Tveskæg's conquest of Norway. And the large chap. 29 is rounded off in an excellent way with "Interea millesimus ab . . .".

If the text that Ari knew was chaptered in the same way, there can be no doubt that he understood that the year 1000 was related to Olav Tryggvason's death.

On the other hand, if one looks at the chaptering of the A-texts, the picture changes at once. As far as I can see, there is no chronological connection between Olav Tryggvason's fall and the year 1000. King Sven's seizure of power in Norway intervenes between these two chapters, and the year 1000 begins with a chapter concerning German and Slavic conditions in connection with Emperor Otto III's death.

From this one almost dares to conclude that Arr's possible version had the first chaptering, namely, as B 2, and that hereby he more or less had a share in creating a tradition to the effect that the battle took place in the year 1000.

Is it possible to determine possible loans or influences from GH in another way? GH's prologue contains a questionable indication of this. For example, it mentions: 102 pleraque omnia seniorum, quibus res nota est, traditione didici, as well as Adam's possible anticipation of critics: In quo opere talibus ausis sciant omnes, quod nec laudari cupio ut historicus nec improbari metuo ut falsidicus, sed quod bene ego non potui, melius scribendi ceteris materiam reliqui (Schmeidler, 1917, p. 3). But the prologues of all medieval historical scribes resemble one another in every respect, to say nothing of the author's demands on the sources and their quotations from informants.

But perhaps Islb and GH can be compared with one another when the purpose of these works comes into the question.

It is only recently that a more general judgment of Ari's authorship and his purpose has become a task for more modern research. F. Jónsson (1920–23, pp. 359–60) considered Ari as a scholar who sought the truth and only the truth. Einar Arnarson (Ellehøj, 1965, p. 81) showed that Islb contained misleading and incomplete information, superficialities, omissions, unclear points, and misrepresentations. Arnarson cannot accept Islb as a complete presentation of Icelandic history of the period, and maintains that it can solely be of antiquarian interest.

B. Sigfusson (Ellehøj, 1965, p. 82) stresses Ari's personal involve-

 $<sup>^{102}</sup>$  Translation from the Latin: . . . by far the greater part I learned from the tradition of older men who knew the facts . . .

<sup>...</sup> Let all know that for this work and for such a bold venture I neither desire to be praised as an historian, nor fear to be condemned as a falsifier; in fact, that which I myself could not do I left for others to write about better...

ment in favor of the bishops' views, and also points out that the struggle between Hafliei Másson and Þorgils Oddason in 1120–21 is significant to an understanding of the background of Islb's composition.

S. Ellehøj agrees with B. Sigfusson, but feels that it is justifiable to go a step farther, and he looks upon the contents of the whole work from this point of view. He concludes that: "Islb is an exhortation to unity, its contents are a proof of how in the course of time subversive tendencies have been overcome to society's good. All Icelanders should support the bishops in their efforts to further Bishop Gizur's national policy, maintain peace, law, and order in the society, and stand together behind Christianity and the church. In this connection it should be mentioned that Ari managed to find a handsome place for his family within the circles that had worked through the years to strengthen unity in the Icelandic society".

Adam deals with the entire history of the Archbishopric, and views it together with German history, the Nordic kings, and the Slavonic princes. His object was to describe the progress of the Kingdom of God on earth, and particularly by means of the work of the Church of Bremen. Both the prologue and the epilogue of Liemar contain an admonition; accordingly, its presentation had a direct aim. GH should thus be viewed against the background of the time when it was composed. Thus, its contents are meant to reflect the bishops, partly an appeal, partly a warning, directed at both good and bad things.

My theory is that Ari directly or indirectly could have had Adam's purpose as his model, and could have kept it in mind when composing Islb. This hypothesis is undeniably weak in consideration of the material that is available, but should, in my opinion, be brought out when attempting to establish a connection between Islb and GH.

### Ari's possible Authorship of Landnámabók

It was stated at an earlier date that Arni Magnussen thought that Ari had written an independent Ldn, a belief that B. M. Ólsen (1893) and J. Jóhannesson (1941) revived.

The most important support of the thesis about Ari's authorship of Ldn is contained in the epilogue of that version of Ldn that is attributed to Haukr Erlendsson (see below; H, p. 124).

For some reason or another recent research in this field has passed over a contribution regarding Ari's authorship which, in my opinion, deserves a certain amount of attention, because it was made as early as in 1838 in GHM I (pp. 1–97).

Several scholars have rejected B. M. Ólsen's theory that Ari should be considered the author of the first Lándnámabók; among others, F. Jónsson felt very strongly about this, 103

F. Jóhannesson's thesis of 1941 rehabilitated B. M. Ólsen, and several scholars have now backed up the theory that Ari was the main author of the earliest Landnámabók. Even though evidence of this kind cannot be accepted as absolutely reliable, there is no doubt that the earliest reports about landnám must stem from ca 1130 or before this date.

Most recently, S. Ellehøj (1965, p. 38) has agreed with the others' theories which also maintain that Kolskeggr must be considered the author of Landnámabók, namely, with regard to the Eastern part of Iceland. Judging from genealogical tables, Kolskeggr was older than Ari.

Along with that confirmation of Hauk's information about Kol-SKEGGR, confidence in the comparable testimony concerning ARI must also grow. And yet the existing editions of Ldn do not directly confirm this, even though Ari apparently was used as a source. Thus both H and P refer to Ari's (Ldn 1900 p. 35) statement: Sva segir Ari Porgilsson at þat sumar fóru v skip ok xx til Groenalands af Borgar firði ok Breiðafirði enn xiiij komutz ut sum rak aptr en sum tyndust. Þat var xvi vetrum fyr en kristni væri i log tekinn á Islandi. S (ibidem chap. 90, p. 156) only gives "frodir menn" as a source, but in common with Pordarbók "xv vetrum fyr en kristni etc. . . .". Since the various datings must be due to faulty transcriptions, it is hard to determine which of them is correct. Meanwhile, it seems doubtful that these chapters originally were included in Ldn; probably they were insertions. F. Jónsson (Islb, 1930, p. 28 and p. 64) implies that this sentence probably belonged in chap VI in Islb, from which it slipped out in an earlier transcript. Later on this notice is referred to the lost "attartolo," and in my view this can be true with respect to both of them.

Accordingly, the chapter does not confirm that ARI could have composed a Landnámabók or simply notes pertaining to it (Ellehøj, 1965, p. 40 et seq.).

Reference to Ari as the informant regarding the geneaologies that are contained in the later literature all apply to the two main families

<sup>103</sup> In Litt. Hist. p. 369 and Islb, 1930, p. 11, respectively. F. Jónsson claimed that Haukr was uncritical and definitely not well-informed about the old literary history. His testimony concerning Ari collapses, in as much as along with this he also mentions Kolskeggr as the author. Jónsson says that it is easy to see the reason for this, for in his landnáma sources Haukr found that both were named as informants, but nowhere as authors. He misunderstood this, and thought that both had written about landnám.

south and east of Breiðafjord, to which Ari himself belonged. According to S. Ellehøj (1965, p. 43) this speaks against the acceptance of a country-wide work from his hand. Yet it must be reasonable to assume that Ari's landnám's and genealogical records must have existed in the lost attartǫlo. Although as far as I can determine, Ellehøj's supposition is highly plausible, it does not prevent the advancement of new theories. A work such as Ldn must be the subject of collaboration among many knowledgeable people, and "it is almost incredible that such a work could have been composed in Ari's time without his having been present" (Jón Helgason, 1951, p. XII).

# APPENDIX TO ISLENDINGASÖGUR

## Dating of Isls

The 17th Century assumption that Sæmund was the author of "Njal's Saga" shows how brief a time one thought had passed between the events and the composition of the saga (KLNM col. 497 et seq.). It was not until the 1800's that this situation became understood, and ca 1200 became the usual dating.<sup>104</sup>

The dangerously mechanical dating "ca 1200" and the acceptance of this improbable hiatus of saga writing between this date and ca 1300 was replaced in the 1900's by the acceptance of a continuous development. Thus, B. M. Ólsen attempted to date the individual sagas carefully. F. Jónsson proposed that the writing of Isls began ca. 1170. S. Nordal<sup>105</sup> set up a form of typological grouping, and dated the earliest group ca 1200.

But later on E. O. Sveinsson partially did not agree with Nordal's proposal. He endeavored to tighten the methodology by analyzing the separate dating criteria and determining how much weight they were capable of bearing. At the same time he proposes that an investigation of, for example, Isls's commencement as a literary genre to be initiated, long with a thorough study of the vague and suspect dating: ca 1250.

E. O. Sveinsson divides Isls into three groups on the basis of chronological criteria. These three are: 1) The archaic Isls, which supposedly were composed in the last decades of the 1100's; 2) the classical version, which is dated at the early 1200's and up to the end of the free state, perhaps 1280–85; 3) the post-classical version.

Only the first two of these are important to this investigation (KLNM VII cols 506–11).

- <sup>104</sup> At the close of the century B. M. Ólsen, *i.a.*, pointed out that the premises of this theory, which were based on the "Sturlunga" prologue, were wrong, as this prologue is representative of the contemporary sagas, and not Isls.
- <sup>105</sup> According to Nordal (1953, p. 181 et seq., and 1957, p. 11 et seq.), the saga cannot be considered a genre; each saga should be discussed separately, each has its own individuality. By comparing the different sagas to one another it might be possible to arrive at a typology of a literaryhistorical nature, as the archaeologists do with their finds.
- 106 Sveinsson (1958, p. 84 et seq.) convincingly refuted Rubow's theory that the Norwegian translation of Tristam's saga in 1226 was the start of the composition of Isls. Using Fostbroeðra saga and the kings' sagas as his starting point, he showed that Isls flourished before Hakon Hakonsson began to translate French romances.

# APPENDIX: LANDNÁMABÓK

"Landnámabók" (Ldn) can be characterized as a collected work of an antiquary, topographical, and geographical nature, and despite its varying contents practically all of the information it contains can be placed in one of these categories.

This book contains records of ca 400 Icelandic landnám's men, where they settled and who their descendants were, and the entire material is presented topographically.

## Survival

Our knowledge of Ldn derives from 5 editions:

- 1) "Sturlubók" (S), which was written by the well-known historiographer Sturla Porðarson (1214–84). It is known to have existed in membrane form in the 1600's and that it was burned in 1728; it was transcribed by Jón Erlendsson, whose transcript is called AM 107 fol.
- 2) As the first part (AM 371 4°) of the great collected manuscript, "Hauksbók" (H).<sup>107</sup> This was written by Hauke Erlendsson, who was born and brought up in Iceland, was a man of law there in 1294–95, and later in Oslo in 1302. H's history in Iceland between 1350 and into the 1600's is unknown; here, again, we owe our knowledge to Jón Erlendsson, for he made a transcript (Am 105 fol.) at a time when but a few of the original ca 210 pages were missing.

In S and H more than ca. 1500 farm names and other place names and more than 3500 persons are mentioned.

3) "Melabók" (M) was composed in the early 1300's. The genealogical deviations it contains are centered upon one family which lived on Melar in Borgarfjord at that time, and this edition is believed to be the work of Snorri Markusson, a man of law (died 1313). Only two pages of M (AM 445 b 4°) dating from the 1400's have survived, but this transcript in a more complete state was used in "Þorðarbók".

<sup>&</sup>lt;sup>107</sup> In regard to the following, see also F. Jónsson, edition of H 1892-96, and J. Benediktsson in KLNM VI col. 250 et seq.

- 4) "Skarðsarbók" (Sk) is a compilation of S and H made on the basis of the membranes by Björn Jónsson á Skarðsa (died 1655) in the 1630's. Although the original manuscript is lost, several transcripts have survived; the best one is AM 104 fol.
- 5) "Pordarbók" (þ)<sup>108</sup> is primarily based upon a transcript of Sk, but has absorbed some variants from M, which was more complete at the time than at present, although it was not fully complete. Þ is attributed to Vicar, Þorður Jónsson on Hitarðalur (died 1670), and is preserved in AM 106 and 112 fol.

Sources: In the course of time efforts have been made to explain the mutual relationship of Ldn's editions, particularly by F. Jónsson<sup>109</sup> but more successfully by B. M. Ólsen (1905, 1908, and 1920). Recent research is now based upon J. Jóhannesson's (1941) results, supplemented by contributions by E. O. Sveinsson (1958). The latter's theories will be presented here. (In the appendix to Islb Ari's possible authorship of Ldn was touched upon; reference is therefore made to this).

The earliest and the dedicated edition of which we have complete knowledge is assigned to Styrmir frodi Karason (died 1245), and "Styrmisbók" presumably was written down about 1220, but is lost (Jóhannesson, 1941, p. 223). We owe our knowledge of it to the epilogue of H, in which Haukr relates that to a considerable extent he used both Styrmis's and Sturlas's editions, which had the same contents. When they differed from one another, however, he employed the most detailed text; this is why his Ldn is the most comprehensive of all of them. This has led to the conclusion that Sturla used "Styrmisbók" as his basis, and that this edition was briefer than "Sturlubók", for Sturla worked over his text and expanded it considerably by drawing on other sources, including several Isls, some of which no longer exist. We now consider the brief narratives as abbreviated repetitions or excerpts of written works.

Furthermore, it is certain that the framework in S and H is secondary in relation to M; <sup>110</sup> this is attributable, in particular, to Sturla's revision, which combined diverse pieces of information from various sources. Seen from an historian's point of view, Sturla's method of procedure is very

- <sup>108</sup> Formerly misleadingly called the later "Melabók", because it was considered a sheer compilation of S and H (see introduction to F. Jónsson "Melabók" 1921).
- $^{109}$  i.a. in Ldn I–III 1900; Ldn "Melabók" (special edition of p 1921; Ldn 1925; here S is the basis, but the framework is M's. Den oldnordiske og oldislandske Litteraturs Historie 2nd ed., 1920–24.
- 110 In M the description of the settlement began at the easternmost boundary of the Southern Quarter and continued westwards, northwards and eastwards, all around the country. Since S and H commence with the discovery of Iceland and the first settlement, which took place on the Southwest Land, this becomes the starting point.

deplorable and wrong, for he preferred the copious sagas of the 1200's to the more realistic survivals of the 1100's, which, despite all their faults, had the prerequisites for being far more reliable.<sup>111</sup>

Apart from those cases in which sources apart from Ldn lend their support (B. M. Ólsen, 1908, p. 170 et seq.; O. Olsen, 1965, p. 31 et seq.), there is only one way in which S can be penetrated with some certainty, and this is by meeting one of the following criteria:

- 1) When a piece of information is contained in H, but not in S, or appears in H in a variant from S. In such case H must have this from "Styrmisbók". (Needless to say, errors and oversights in the surviving S-manuscript should be taken into consideration).
- 2) When a piece of information is contained in both S and H, as well as in M. In such cases the information must also have been included in "Styrmisbók" provided that Sveinsson's hypothesis is tenable as well as in a still earlier version of Ldn. (See Sveinsson, 1958, pp. 90–92; O. Olsen, 1965, p. 32).

A considerable part of the many extensions are remarkably like passages in various Isls, and Jóhannesson's (1941, pp. 67–136) investigations show that in such cases it is most frequently the sagas that are primary in relation to Ldn, even though the opposite also can be true.

"If one rids Ldn of its layer of saga references, the framework becomes tighter and the contents more uniform. The nucleus of each single narrative is a brief account of the landnám men's origin and of the actual settlement, to which is added an explanation of the family's growth, with special mention of prominent descendants." (O. OLSEN, 1965, p. 33).

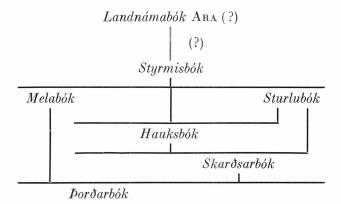
Sk, in particular, is the more interesting of the two 17th Century editions. Since Haukr used S as his source, it may seem surprising that Björn Jónsson was able to fill out H by making use of S. The reason for this is that Haukr abbreviated the text in several places, skipped something, or gave preference to another source.<sup>112</sup>

<sup>111</sup> Many sagas have nevertheless been preserved for posterity by this means. Sturla probably composed his Ldn as the first chapter of a work that was to comprise Iceland's history from its inception to his time; this gives a natural explanation of his addition of the introduction that deals with the discovery of Iceland.

 $^{112}$  p's importance lies in its deviation from Sk, as far as this can be attributed to the lost part of Am 495 b 4°.

As a result of its completeness Sk became the basis of the three first editions of Ldn: Skálhólt 1688, Copenhagen 1774 and 1829. The fourth edition, 1843, used S as its main text. Additions from H in italics. In the 1900 edition H, S and M are printed separately, but F. Jónsson did not give sufficient consideration to the fact that B. Jónsson had used the vellum books. In the 1925 and -21- editions he used p as his basis, mistakingly maintaining that in all essentials it was based on "Styrmisbók". He assigned Sk to the group of worthless paper manuscripts. But J. Benediktson rehabilitated Sk in 1958.

A stemma of Ldn's sources thus looks like the following (J. Jóнаnnesson, 1941, p. 226.):



In addition, such material as was obtained from sources other than the various editions of Ldn.

## **SUMMARY**

The object of this paper is to give a critical analysis of the written and archaeological sources which scholars have used for decades in studying the Norse settlement in Greenland.

Introduction explains the sources that were employed in this investigation, and also shows how the analysis was carried out. It should be noted that work on this paper was completed in the summer of 1968.

Chapter I treats quite briefly two Papal bulls dispatched to the archiepiscopal see in Hamburg-Bremen in the 1050's, in which Greenland is mentioned for the first time. The theory is advanced that there is considerable likelihood that Isleif, who was the bishop in Iceland later, provided the information on Iceland and Greenland when he was studying at the archiepiscopal see.

Chapter II is concerned with the information contained in Adam of Bremen's GH, which is the earliest account that deals with Greenland.

ADAM made the first attempt to place Greenland geographically, though not quite successfully. His knowledge of the land is very limited, which is reflected, in particular, in his use of popular etymologies and loans from antique authors. He is aware that the Greenlanders and the Icelanders have the same way of life, and even though some scholars have cast doubt upon his description of life in Iceland, it nevertheless reveals certain characteristic features that should be credited with some reliability.

Everything considered, the inclusion of Greenland in this work must be seen against the background of Archbishop Adalbert's efforts to have his bishopric changed into a partriarchate, into which the remote Greenland entered as one of the pawns in the game; this is the reason why a separate chapter was devoted to this island. Adam has nothing to say about nature conditions in the Arctic.

Furthermore, it is demonstrated that on the basis of this narrative there is no reason for mentioning a bishop of Greenland, or that the island was subject to the Icelandic diocese. The evidence is far too meager. This also is true of the question whether Greenland was under Norwegian rule prior to 1261.

The final conclusion must be that as a source of Norse history in Greenland Adam's account contains so many dubious elements, faults, and self-contradictions that its worth must be considered extremely slight.

Chapter III. The earliest surviving Icelandic source that mentions Greenland is Ari Frodi's Islb.

Greenland is placed fairly prominently in this national work. One of Ari's aims was to emphasize the Icelanders' achievements in general, and those of the people in Western and Northern Iceland in particular. In both cases Greenland enters into the picture. It is essential to Ari to make it clear that an Icelander was the discoverer of Greenland, and settled there; it is of minor importance to him to describe time past on the neighboring island up to the composition of Islb. This obviously had nothing to do with the aim of the work.

Nevertheless, the information he provides, plus the detached comments from Ldn (see appendix to Islb) are rather poor. And one cannot help wondering why the notice regarding the Skrællings is given such high priority at the expense of a more detailed description of the Greenlanders. The explanation may be that by means of this comment Ari has the opportunity to draw Vinland into the picture, thereby putting the Icelanders into an even more dazzling light. But other possible reasons are that 1) Ari knew little more than that which he reports and which has survived; 2) since the Greenlanders's way of life was not notably different from that of the Icelanders at the time there was nothing exceptionally new to report. The latter reason probably is the more likely of the two; yet only a few things can be proved by archaeological means.

Most important of all is the notice that places the colonization of Greenland chronologically. To be sure, a relative chronology is subject to some uncertainty, but this is unimportant in this connection where it is established that the settlement took place in the course of the last two decades of the 900's and on.

Chapter IV. There is good reason to believe that HN is our earliest Norse source of Greenland's history after Islb. In common with the above-mentioned works, the results of the analysis do not give us much to go on:

Greenland is fitted into the Norse picture of the world; it is reported that navigation to Greenland is dangerous because of icebergs, storms, etc. The Icelanders, and not the Norwegian King, Olav Tryggvason, brought Christianity to Greenland. The information to the effect that

Greenland is not counted as one of the "tributary islands" is also significant. Concerning the land itself, the only comment is that Greenlandic hunters met Eskimos in North Greenland, but nothing is said about the consequences. Finally, there is an abundance of legend material that has extremely poor value as a source.

Chapter V. That group of the saga literature known as Isls is presented here. Survivals, scaldic poetry in the texts, the authors, "Freiprosa", and the "Buchprosa" theories, and, last but not least, the importance of Isls as a source are explained. As far as Isls's are concerned, it is concluded that at present historical research works with problems that are entirely different from tradition and saga. This literary genre's depiction of people and its epic tales of events that often had taken place 2–300 years earlier, does not reach the primary factors that are decisive to the course of development.

The value of the sagas as source materials must therefore be examined on the basis of three facts:

- 1) At least 200 years went by between the events and the first time they were recorded. In the course of time the narratives were not only subjected to revisions through oral repetitions, but much of the material must also have been in the hands of the learned men who, with their genealogical, chronological, and topographical studies supplemented the imperfect survivals with materials from other sources and with constructions.
- 2) The survival occurred on Iceland, not only subsequent to the year 1200, but also earlier. This implies a considerable limitation, and we cannot be sure that the saga is representative with respect to the events in Greenland.
- 3) The fact that the earliest traceable version is a saga must be considered significant.

The sagas have preserved their artistic value, but have lost much of their historical trustworthiness. Today nobody should accept them as first-hand sources; on the contrary, one must tackle them on the assumption that they represent the authorship of a later period.

EsR and Gs are thereupon analyzed in chapter VI – date of composition, survival, construction, and additions. It would not be timely to point out all of the examples here. Amazingly little remains that has historical interest as far as Greenland is concerned. The topographical information is usable to but a limited extent; for example, it is commented that Eirik lived at Brattahlid in Eiriksfjord, yet we do not really find out where this and all the other localities are situated. With respect to the introduction of Christianity, it is most believable

that this took place after Eirik's death, as Gs maintains; the numerous Christian components and anecdotes on the subject thereby automatically drop out of the chapters in which Eirik appears. The most important question here concerns "Tjodhilde's church", which must go along with Leif's and Olav Tryggvason's missionary activities into the world of fantasy.

In brief, we learn nothing about Greenland in the early Middle Ages beyond that which the earliest historical accounts sparingly reveal. But the investigation has given support to the presumption that Isls have little value as a source, in this case those that deal with Greenland.

Since there are so few written sources, in seeking source material other than that the sagas provide we must, in regard to the history of the early Middle Ages and the Viking Age, look for new ideas and material in, for example, the field of archaeology. It will never be possible to prove that the information the sagas give is accurate, only that it may be so.

But before we turn to the comprehensive archaeological materials, we have in Chapter VII discussed the sources pertaining to the topography of Norse Greenland; some of these have already been mentioned previously. A study of the Icelandic materials shows that little progress can be made toward the reconstruction of the Norse settlements' topography. We are somewhat more fortunate with respect to the Norwegian's, Ívar Bardarson's account on Greenland, which has survived in the form of 16th Century transcripts; but since these are contemptible from the point of view of textual criticism, this possibly important source is ignored, apart from comments on the list of churches.

There is little likelihood that it will be possible to arrive at the final solution of the problems connected with the topographical investigations of Norse Greenland, and this will scarcely do any harm to future research.

Although the author has little faith in the originality of the place names, he finds it necessary to use the Norse designations, first and foremost for the reader's sake, as the numbers of the ruin groups have been commonly used in but a very few accounts.

The character of the Norse settlement in the two settlements is presented in Chapter VIII – what considerations were taken in selecting the place where the farm was to be situated, as well as the special conditions that applied with respect to the choice of building materials.

The types of farms are discussed in Chapter IX: long-house, passage-house, and centralized farm, on the basis of the ruin groups that have been the subject of archaeological investigations since the 1890's. It should be noted that the majority of these investigations cannot

meet present-day methodical demands, and this is emphasized in the individual cases.

Setting up the development of the various farm-types chronologically involves the greatest difficulties. The finds are but little help in this connection. For example, the best dating materials, pottery, is lacking almost everywhere in the excavated areas, and despite an abundance of forms, the steatite vessels have not yet been be placed in any chronological order.

As was true in Iceland to a certain extent, the Norse culture in Greenland was practically speaking self-sufficient; as a result only very few objects can be described with certainty as imports from Europe. Thus the majority of the finds are of local origin, and the decorative art is so conservative that early Romanesque forms prevail throughout the Middle Ages.

In brief, a study of the development of the farm types leads to the conclusion that on the basis of the material that has been brought to light to date it is not even possible to set up a relative chronology; the available material is far too incomplete.

The brief chapter X concerns finds of a pagan character: the runic stave from the Narssaq Farm, a steatite fragment with an incised Thor's hammer. In addition, possible pagan graves in both the Eastern Settlement and the Western Settlement are commented upon.

The church ruins are discussed in chapter XI.

The testimonies of the written sources regarding the churches in Greenland are few in number and are in reality without any importance to a study of the churches' architecture. Another important factor is that the number of registered church sites exceeds even that number the Icelandic sources give as a maximum; and new ones will in all likelihood see the light of day in the coming years.

In particular, the cathedral in Gardar and the presumed monastery and the convent are subjected to a critical investigation and reevaluation. A study of the collected archaeological material that pertains to the churches shows that, apart from "Tjodhilde's church", new investigations of practically speaking of the churches excavated to date would be desirable, as previous results are built upon a very inadequate basis.

It would therefore be incorrect at this point to put forth any final conclusions, to say nothing of any dates; nevertheless, some principal inferences can be drawn from the available material.

Accordingly, it is certain that the architecture of the latest stone churches had prototypes in Norway, and that influences must have come from there. The older wooden churches that were probably surrounded by protective walls of turf and/or stones are another matter. These types

have not yet been found in Norway. In Iceland the material is very meager, but if it is related to the written sources it appears that the earliest plan also existed here. There should consequently be good reason to believe that models were obtained from Iceland in the early Middle Ages, whereas in regard to the later period the close connection with Norway automatically gave that country's church building customs prominence, especially since stone churches only occurred in two cases in Iceland, and neither was completed in the Middle Ages.

The strong Celtic strain, *i.a.* in grave crosses, etc., scarcely indicates any direct connection with the West Norwegian colonization on the Atlantic Islands; more probably these characteristics came to Greenland via Norway and Iceland, and as a result of the pronounced conservatism in the art of Greenland were retained long after they had gone out of style in the other Scandinavian areas.

Chapter XII is devoted to finds and to the zoological materials, etc.

Attention is called, *i.a.*, to the lack of cooperation with the natural sciences, first and foremost with the bog geologists, to a lesser degree with the glaciologists. Climatic deterioration has been discussed for decades, but a final solution of this problem has yet to be found.

In regard to the majority of the animal bones that has been scientifically investigated, as well as other finds, insufficient consideration has been given to the layers in which they were found; in other words, it is impossible to determine with certainty to what period of the settlement they should be assigned.

In the description of the large barns and stalls that testify to animal husbandry on a considerable scale, examples are given of the recently found irrigation installations and damming of lakes and rivers. These should perhaps be dated as belonging in the 14th Century, when a climatic change that brought about dry summers is believed to have taken place.

Conclusion. See pp. 125-127.

### BIBLIOGRAPHY

### I. Texts

(Adam of Bremen): Magistri Bremensis Gesta Hammaburgensis Ecclesiae Pontificum. 3. Auflage, herausgegeben von B. Schmeidler. Hannover & Leipzig, 1917.

Adam af Bremen: De hamburgske Ærkebispers Historie, translated by C. L. Hen-RICHSEN, København, 1930.

Alfroeði Islenzk. Islands encyklopædiske Litteratur. I. Codex membr. AM 1948. København, 1908.

(Ari porgilsson). Are hinn Frode porgilsson, *İslendingabók*, edited by F. Jónsson, København, 1930.

Arı porgilsson hinn froði, *Íslendingabók*, edited by A. Holtsmark. Nordisk Filologi A 5. Oslo-Stockholm-København, 1952.

Diplomatarium Danicum 1. series, vol. 2. København, 1963.

Diplomatarium Norvegicum I-XIX. Kristiania, 1849-1915.

Eiriks saga Rauða, edited by G. Storm, København, 1891.

Flateyjarbók I-IV. Reykjavik, 1945.

Grágás, Islændernes lovbog i Fristatens tid, I-IV, edited by V. Finsen. København, 1852-70.

(Gronlandia) Arngrimi Jonae: Opera latine conscripta vol. II, Bibliotheca Arnamagnæana vol. X, København, 1951+vol. IV: Introduction and Notes. Bibliotheca Arnamagnæana vol. XII. København 1957, edited by J. Benediktsson.

Grænlands Annálar by Björn Jónsson á Skarðsa - see GHM I-III.

Gunnlaugs saga Ormstunga, edited by F. Jónsson. København 1916.

Hauksbók, edited by F. Jónsson. København 1892–96.

(Heimskringla): Snorri Sturluson: Kongesagaer, translated by G. Storm. 2. ed. Kristiania, 1900.

Heimskringla af S. Sturluson, edited by F. Jónsson. København, 1911.

(Historia Norvegiæ) Monumenta Historica Norvegiæ, edited by G. Storm. Kristiania, 1880.

(Historia Norvegiæ) Den eldste Noregshistoria, translated by H. Конт. Norrøne Bokverk 19. 2. ed. Oslo, 1950.

A. Huitfeldt. Den geistlige Histori offuer alt Danmarckis Rige. København 1653. Hakon Hakonssons saga – see GHM II.

Islandske annaler til 1578. Edited by G. Storm. Kristiania 1888.

Isleifs pattr, *i.e. Byskupa sögur*. Edited by J. Helgason. Det kongelige nordiske Oldskriftselskab. København 1938.

Íslendingabók – see Ari.

Islenzk Fornrit, vol. IV. Edited by M. pordarson. Reykjavik 1934 - Contents a.o. Eyrbyggja saga, Eiriks saga Rauða, Groenlendinga saga and Gronlendinga pattr.

Ívar Barðarson. Det gamle Grønlands beskrivelse, edited by F. Jónsson. København, 1930.

Konungs Skuggsjá. Speculum Regale. Udgivet af Det kongelige nordiske Oldskriftselskab. Hæfte I–II. København, 1920–21.

Kristni saga – see Hauksbók pp. 126-49.

Landnámábók I–III. Edited by F. Jónsson. København, 1900.

Melabók, Landnámabók. Edited by F. Jónsson. København, 1921.

Landnámabók Islands. Edited by F. Jónsson. København, 1925.

(Landnámabók). Fortællinger fra Landnámabók. Edited by J. Helgason. Nordisk Filologi. Serie A. III. København-Oslo-Stockholm, 1951.

Landnámabók Skarðsarbók, edited by J. Benediktsson. Reykjavík, 1958.

Norges gamle Love I-V. Kristiania, 1846-95.

(ÓLAF TRYGGVASON) Saga Óláfs Tryggvasonar af Oddr Snorrason munk. Edited by F. Jónsson. København, 1932.

(Ordericus Vitalis). Historiske beretninger om Normanner og Angelsaxere fra Orderik Vitals kirkehistorie I–III, translated by P. Kierkegaard. København, 1889.

(Scalds' poems). Den norsk-islandske skjaldedigtning, edited by F. Jónsson. København, 1912.

Sturlunga saga I-II, edited by K. Kålund. København & Kristiania, 1904.

### II. Literature

Anker, J. & S. Dahl. 1938. Fabeldyr og andre fabelvæsener. København.

ARUP, E. 1925. Danmarks historie I. København.

BAK, O. 1969. Sommerdage ved Kap Farvel. Grønland, pp. 229-48. København.

Bekker-Nielsen, H. 1960. Årstallet 1056. Bibliotheca Arnamagnæana XX, Opuscula, vol. I. København.

Beyschlag, S. 1953. Möglichkeiten mündlicher Überlieferung in der Königssaga. Arkiv for nordisk filologi. Vol. 68, p. 109–39. Lund.

BIBLIOGRAPHY OF OLD NORSE-ICELANDIC STUDIES 1963-. København 1964-.

BJØRNBO, A. A. 1909. Adam af Bremens Nordensopfattelse. ÅNOH. København.

— 1912. Cartographia Groenlandica. Meddr Grønland 48.

Bolin, S. 1931. Om Nordens äldsta Historieforskning. Studie över dess metodik och källvärdi. *Lunds Universitets årsskrift*. N.F. Avd. 1. Vol. 27. Lund.

— 1948. Zum Codex Havniensis, G. Kgl. S. 2296. *Classica et Mediaevalia*. Vol. X. København.

Bruun, D. 1896. Arkæologiske undersøgelser i Julianehaabs Distrikt. *Meddr Grønland* 16,3.

- 1916. Oversigt over Nordboruiner i Godthaab- og Frederikshaab-Distrikter. Meddr Grønland 56,3.
- 1931. Erik den Røde. 2. Ed. København.

Brøgger, A. W. 1937. Vinlandsferdene. Oslo.

Bugge, A. 1909. Vestfold og Ynglingeætten. *Historisk Tidsskrift* 4th Ser. vol. 5, p. 433-54. Kristiania.

Bugge, S. 1873. Den i Skotland fundne Norgeskrønike. ÅNOH. København.

Bull, E. 1922. Grønland og Norge i Middelalderen. Det norske geografiske selskabs Aarbok, vols. XXXI-XXXII, 1919-21. Kristiania.

CLEMMENSEN, M. 1911. Undersøgelsesrejse i sommeren 1910. Kirkeruiner m. m. i Julianehaabs distrikt. *Meddr Grønland* 47. København.

Curle, A. O. 1939. A Viking Settlement at Freswick, Caithness Proceedings of the Society of Antiquaries of Scotland. Vol. 73. Curschmann, F. 1909. Die älteren Papsturkunden des Erzbistums Hamburg. Hamburg & Leipzig.

Dahl, S. 1938. - See Anker, J. 1938.

Degerbøl, M. 1929. Animal Bones from the Norse Ruins at Gardar. *Meddr Grønland* 76,3.

— 1936. Animal Remains from the West Settlement in Greenland with special Reference to Livestock. *Meddr Grønland* 88,3.

EINARSDOTTIR, Ó. 1964. Studier i kronologisk metode i tidlig islandsk historieskrivning. Lund.

Elleнøj, S. 1965. Studier over den ældste norrøne historieskrivning. København.

FREDSKILD, B. 1969. Nordboplanter - vikingernes ukrudt. Grønland, pp. 97-106.

— 1969. Nordboernes landnam under mikroskop. *Nationalmuseets Arbejdsmark*, pp. 46-57. København.

Gad, F. 1957. Grönland und der übrige Norden. Europa-Archiv 12,1.

 — 1964. Kronologien omkring det norrøne landnam på Grønland. Grønland, p. 89 et seq.

— 1964. Grønlands tilslutning til Norgesvældet 1261. Grønland, p. 259 et seq.

— 1964. Oprettelsen af bispesædet i Gardar 1126. Grønland, p. 461 et seg.

— 1966. Vinlandskortet. Historisk Tidsskrift 12th ser. vol. II. København.

— 1967. Grønlands historie, vol. I. København.

Grönlands historiske Mindesmærker I-III udgivne af Det Kongelige Nordiske Oldskrift-Selskab. København 1838-45.

Guðmundsson, V. 1889. Privatboligen på Island i Sagatiden. København.

Hallberg, P. 1965. De islandske sagaer. København.

Hamilton, J. R. C. 1956. Excavations at Jarlshof, Shetland. Edinburgh.

Helgason, J. 1934. Norrøn litteraturhistorie. København.

Helle, K. 1967. Review of Ó. Einarsdottir's and S. Ellehøj's books in *Historisk Tidsskrift*, p. 68 et seq. Oslo.

HERMANNSSON, H. 1936. The Problem of Wineland. Islandica 25. New York.

Heusler, A. 1914. Die Anfänge der isländischen Saga. Berlin.

Holber, B. 1967. De saliges Øer. Skalk no. 5, p. 15 et seq. København.

— & Piø, J. 1967. Fabeldyr og sagnfolk. København.

Holm, G. 1883. Beskrivelser af ruiner i Julianehaab distrikt. Undersøgelse af rejse i Aaret 1880. Meddr Grønland 6.

Holtsmark, A. 1939. Review of H. Koht's Sagalitteraturen. Nordisk Tidsskrift, p. 169 et seq.

INGSTAD, H. 1960. Landet under polarstjernen. København.

IVERSEN, J. 1934. Moorgeologische Untersuchungen auf Grönland. Meddelelser fra Dansk geologisk Forening, vol. 8. København.

 — 1935. Nordboernes undergang på Grønland i geologisk belysning. Det grønlandske Selskabs Aarsskrift. Københayn.

Jansson, S. B. F. 1945. Sagorna om Vinland I. Kungliga Vitterhets Historie och Antikvitets Akademiens Handlinger. Del. 60.1. Stockholm.

Jessen, C. A. E. 1862. Undersøgelser til nordisk oldhistorie. København.

— 1872. Glaubwürdigkeit der Egilssaga und anderer Isländersagas. *Historischer Zeitschrift*, vol. 28. München.

Jóнannesson, J. 1941. Gerðir Landnámabókar. Reykjavik.

— 1956. *Íslendingasögur*. I. þjóðveldisöld. Reykjavík.

— 1962. The Date of the Composition of the Saga of the Greenlanders. Sagabook of the Viking Society vol. XVI. Part I. London.

- Jones, G. 1964. The Norse Atlantic Saga. London.
- Jónsson, F. 1899. Grønlands gamle topografi efter kilderne. Meddr Grønland 20.
- 1912. Erik den Rødes saga og Vinland. Historisk Tidsskrift 5th ser. vol. I.
   Kristiania.
- 1915. Opdagelsen af og rejserne til Vinland. ÅNOH, pp. 205–22. København.
- 1920–23. Den oldnorske og oldislandske litteraturs historie. 2nd. ed. I–II. København.
- 1927. Flateyjarbók. ÅNOH. København.
- Knuth, E. 1944. Bidrag til Vesterbygdens topografi. Det grønlandske Selskabs Aarsskrift, p. 81 et seq. København.
- Косн, H. 1963. Kongemagt og kirke 1060–1241. Politikens Danmarkshistorie, vol. 3. København.
- Конт, H. 1914. Sagaernes opfatning av vor gamle historie. *Historisk Tidsskrift* 5th ser. vol. II. Kristiania.
- 1921. Innhogg og Utsyn. Kristiania.
- 1931. The Old Norse Sagas. London & New York.
- 1949-51. Historia Norvegiæ. Historisk Tidsskrift vol. 35, p. 49 et seq. Oslo.

Квосн, К. 1965. Tjodhildes kirke. Nationalmuseets Arbejdsmark. København.

- 1967. Erik den Rødes Grønland. Sagatekster i oversættelse ved H. Bekker-Nielsen. København.
- KULTURHISTORISK LEKSIKON FOR NORDISK MIDDELALDER, I-. København 1956-. Kålund, K. 1889. Katalog over den arnamagnæanske håndskriftsamling, I. København.
- 1913. En islandsk vejviser for pilgrimme fra 12. århundrede AM 194. ÅNOH. København.
- Lárusson, Ó. 1953. Grágás. Tidsskrift for Rettsvitenskap.
- Lie, H. 1939. Noen metodologiske overveielser i anl. av et bind av "Islenzk Fórnrit". Mål og Minne, pp. 97-138.
- Liestøl, K. 1929. Upphavet til den islendske ættesaga. Oslo.
- Lönborg, S. 1897. Adam af Bremen och hans skildring af Nordeuropas länder och folk. Uppsala.
- MATHIASSEN, T. 1935. Skrællingerne i Grønland. København.
- Meldgaard, J. 1961. Om de gamle nordboer og deres skæbne. *Grønland*, pp. 93 et seg. København.
- 1964. Tjodhildes kirke på Brattahlid. Grønland, pp. 281 et seg. København.
- 1965. Nordboerne i Grønland. En vikingebygds historie. København.
- 1966. Nordboernes Vesterbygd. Grønland, pp. 401-12. København.
- MOLTKE, E. 1936. Greenland Runic Inscriptions IV. Meddr Grønland 88, 2. Appendix p. 223.
- 1961. En grønlandsk runeindskrift fra Erik den Rødes tid. Grønland, pp. 401–12.
   København.
- Nansen, F. 1911. Nord i Taakeheimen. Kristiania.
- Nielsen, N. 1929. Evidence on the Extraction of Iron in Greenland by the Norsemen. *Meddr Grønland*, **76**, 4.
- 1936. Evidence of Iron Extraction at Sandnes in Greenland's West-Settlement. Meddr Grønland, 88, 4.
- Nordal, S. 1953. Sagalitteraturen. *Nordisk Kultur* VIII B. Stockholm-Oslo-København.
- 1957. The Historical Elements in the Islandic Family Sagas. Glasgow.
- Nottarp, H. 1964. Das Grönlandsbistum Gardar. Zeitschrift der Savigny-Stiftung für Rechtsgeschichte, vol. 81. Kanonistische Abteilung L. Weimar.

- Nørlund, P. 1924. Buried Norsemen at Herjolfsnes. Meddr Grønland 67, 1.
- 1927. Kirkegården på Herjolfsnes. *Historisk Tidsskrift* 5th ser. vol. 6, p. 385 et seq. Oslo.
- 1928. Nordboproblemer i Grønland. Geografisk Tidsskrift, vol. 31. København.
- 1967. De gamle Nordbobygder ved Verdens Ende. 4th ed. København.

Nørlund, P. & Roussell, Aa. 1929. Norse Ruins at Gardar. Meddr Grønland 76, 1.

Nørlund, P. & Stenberger, M. 1934. Brattahlid. Meddr Grønland 88, 1.

ÓLSEN, B. M. 1893. Om Are Frode. ÅNOH, p. 207 et seq. København.

- 1905. Landnáma og Eyrbyggja saga. ÅNOH. København.
- 1908. Landnáma og Laxdoela saga. ÅNOH. København.
- 1920. Landnáma og Eiriks saga Rauða. ÅNOH. København.

Olsen, M. 1932. Kingigtorsuak-stenen og sproget i de grønlandske runeindskrifter. Norsk Tidsskrift for Sprogvidenskab, V. Oslo.

Olsen, O. 1965. Hørg, Hov og Kirke. ÅNOH. København.

Paasche, F. 1915. 3 islandske bisper. Norsk Kirkeblad XII.

— a.o. 1957. Norges og Islands litteratur I. Oslo.

Petersen, J. 1919. De norske vikingesværd. Skrifter udgivet av Det norske Videnskaps Akademi i Oslo, Oslo.

— 1933-36. Gamle gårdsanlegg i Rogaland. I-II. Oslo.

Petersen, R. 1961. Om Kalaleg. Grønland, p. 462 et seg. København.

Рію, Ј. 1967. - See Holbek, В. 1967.

Rosenkrantz, A. 1967. Bjørnefælden ved Nûgssuaq og nordboernes Eysunes i geologisk belysning. *Grønland*, pp. 377–84. København.

— 1967. Runestenen fra Kingigtorssuaq i geologisk belysning. *Grønland*, pp. 349–62. Kahenhayn

ROUSSELL, AA. 1936. Sandnes and the Neighbouring Farms. Meddr Grønland 88, 2.

- 1941. Farms and churches in Greenland. Meddr Grønland 89, 1.
- 1953. Byggeskikken på de nordatlantiske øer. *Nordisk Kultur* XVII: Bygningskultur. København.

Ræstad, A. 1933. Historiske vildfarelser i Grønlandsdommen. Festskrift til H. Конт. Oslo.

Schmeidler, B. 1918. Hamburg-Bremen und Nordost-Europa vom 9.–11. Jahrhundert. Leipzig.

Skard, E. 1935. Målet i Historia Norwegia. Skrifter utgivne av Det norske Videnskaps Akademi i Oslo. II. Hist.-filos. klasse 1930, no. 5. Oslo.

Skovgaard-Petersen, Inge. 1969. Review of K. J. Krogh: Erik den Rødes Grønland, 1967, in Historisk Tidsskrift 12th ser., vol. III, pp. 564-66, København.

Solberg, O. 1931. Ivar Bårdssøns Grønlandsbeskrivelse. Norsk Geografisk Tidsskrift, III. Oslo.

Steinnes, A. 1946–48. Ikring Historia Norvegia. *Historisk Tidsskrift*, vol. 34, p. 1 et seq. Oslo.

- 1949-51. Meir om Historia Norvegiæ. Historisk Tidsskrift, vol. 35, p. 173 et seq. Oslo.
- 1958. Ein nordpolsexpedisjon år 1360. Syn og Segn. 64. årgang. Oslo.

Stenberger, M. 1943. (Editor). Forntida gårdar i Island. København.

Stephensen, K. 1914. Nye fund af Nordboruiner i Østerbygden. Meddr Grønland 51.

Storm, G. 1873. Yderligere bemærkninger om den skotske Historia Norvegiæ. ÅNOH. København.

- 1877. Den forstenede Myr på Søndmøre. Historisk Tidsskrift vol. 4, p. 484 et seq.
   Kristiania
- 1887. Studier over Vinlandsrejserne. Vinlands geografi og topografi. ÅNOH. København.

- Sveinsson, E.O. 1958. Dating the Islandic Sagas. Viking Society for Northern Research. University College. London.
- Torfessøn, T. 1927. Det gamle Grønland eller Det gamle Grønlands Beskrivelse. (Gronlandia Antiqua from 1706 in the author's own translation). Oslo.
- TROMMER, AA. 1957. Komposition und Tendenz in der Hamburgischen Kirchengeschichte Adam von Bremens. Classica et Mediaevalia, vol. XVIII. København.
- porsteinsson, B. 1963-64. Some Observations on the Discoveries and the Cultural History of the Norsemen. Sagabook of the Viking Society. Vol. XVI. Parts 2-3. London.
- Vandvik, E. 1952. A new Approach to the Konungs Skuggsjá. Symbolae Osloensis, vol. XXIX. Oslo.
- 1952. Gåter i Kongespejlet. Syn og Segn, vol. 58, p. 1 et seq. Oslo.
- Vebek, C. L. 1943. Inland Farms in the Norse East Settlement. *Meddr Grønland* 90. 1.
- 1943. Nordboforskningen i Grønland. *Geografisk Tidsskrift*, vol, 46. pp. 101–28. København.
- 1952. Vatnahverfi. En Middelalders Bondebygd i Grønland. Nationalmuseets Arbejdsmark. København.
- 1953. Klostre i de grønlandske Nordbobygder. Grønland, pp. 195-200. København.
- 1953. Nordbobygdernes Kirker. Grønland, pp. 300-304. København.
- 1953. Vatnahverfi. Grønland, pp. 219-224. København.
- 1956. Mellembygden. Grønland, pp. 92-96. København.
- 1956. Ten Years of Topographical and Archaeological Investigations in the Mediaeval Norse Settlements in Greenland. *Proceedings of the 32nd International Congress of Americanists*. København.
- 1964. En Landnamsgaard i Nordbygderne i Grønland. *Naturens Verden*, pp. 200–225. København.
- 1966. Kirke-topografien i Nordboernes Østerbygd. Grønland, pp. 198–212.
- 1968. The Church Topography of the Medieaval Norse East Settlement in Greenland. Report of the Fifth Viking Congress in Tórshawn, pp. 37-54. July 1965.
- Weidick, A. 1959. Glacial Variations in West Greenland in Historical Time, Part I. Meddr Grønland 158, 4.
- Wolfe, M. 1968. Review of K. J. Krogh: Erik den Rødes Grønland, 1967, in *Mediaeval Scandinavia* vol. I, pp. 236-39. Odense.

# INDEX OF PERSONS AND WRITTEN SOURCES

ADALBERT, Archbishop of Bremen, p. 12-25, 37, 128, 139 Adam of Bremen's Gesta Hammaburgensis Ecclesiae Pontificum, p. 12-25, 28, 34, 35, 36, 37, 63, 65, 125, 128-31, 139, 140 AGAPITUS II, Pope 946-55, p. 12 AGNELLUS, p. 33 Albert, Bishop, p. 23 ALEXANDER II, pope 1061-73, p. 13 Anker, J, p. 39 Annálar, Grænlands—see Grænlands AnnálarAnonymus Leidensis, p. 37 Ansgar, p. 16 ARI PORGILSSON The Learned (see also Íslendingabók), p. 18, 26-31, 37, 54, 128, 129, 130, 131, 132, 133, 136, 140 Arnarson, Einar, p. 130 Arne, bishop in Bergen, p. 72 Arngrimi Jonae i.e. Arngrimur Jónsson, p. 8, 55, 68, 69, 70 Arnulf, Clerical from Trøndelagen, p. 33 ARUP, ERIK, p. 13 Augustin, Father of the Church, p. 16

Bak, Ove, p. 11
Balslev-Jørgensen, Jørgen, p. 9
Bede, The Venerable, p. 16, 18, 19, 28, 63, 128, 129
Bekker-Nielsen, Hans, p. 52, 62
Benediktsson, Jakob, p. 69, 135, 137
Benedictus VIII, Pope (1012–27), p. 12
Beyschlag, Siegfried, p. 42
Bibrau *i.e.* Norse mythological person, p. 100
Bjarni Herjolfsson, p. 52, 53, 54, 57, 58, 59, 62, 63, 64, 65, 67

BJARNI GRIMOLFSSON, p. 57
BJØRNBO, A. A., p. 18, 19, 36
BJÖRN JÓNSSON Á SKARĎSA, p. 8, 55, 68, 69, 70, 72, 136, 137
BOLIN, STURE, p. 17
BRANDR SÆMUNÐARSON ÞYSKUP i.e.
BRAND, Bishop the First 1163–1201, p. 51
BRANDR JÓNSSON OF HÓLAR i.e. BRANDR, Bishop the Second 1263–64, p. 51
BRUUN, DANIEL, p. 8, 9, 71, 91, 92, 96
BRØGGER, A. W., p. 51, 63
BUGGE, SOPHUS, p. 34, 35, 45
BYSKUPA SÖGUR, p. 14, 57

Cassiodor, Roman Historian, p. 16 Christensen, Aksel E., p. 129 Chronicon Lethrense, p. 37 Clemmensen, Mogens, p. 92, 109, 111 Curle, A. O., p. 80, 85 Curschmann, Friedrich, p. 12–13

Dahl, Svend, p. 39

Danmarcks Riges Krønicke, see Arild
Huitfeldt

Degerbøl, Magnus, p. 55, 123, 124

Descriptio Insularum Aquilonis, i.e. The
4.th Book of Gesta Hammaburgensis

Edda, p. 43
Egede, Hans, p. 8
Eggers, V. H. P., p. 8
Eigla, i.e. Egil's saga, p. 44, 45
Einarsdottir, Ólafia, p. 26, 28, 128, 129
Einar Sokkason (Einars Pattr Sokkasonar), p. 54, 68
Einar: settles the Einarsfjord (Igaliko)
Einhard, medieval historian, p. 16
Eirik, Norwegian archbishop, p. 33

Eirik, the earl, p. 52, 53, 63
Eirik Rauða, p. 18, 27, 28, 30, 31, 41, 49-67, 80, 102, 141, 142
Eiriks saga Rauða, p. 41, 49-67, 103, 141
Eldjarn, Kristian, p. 86, 91, 95
Ellehøj, Svend, p. 26, 27, 28, 33, 128, 129, 130, 131, 132, 133
Ethicus Hester, p. 37
Eyrbyggja saga, p. 50, 55, 59

Finnbogi,—see Helgi and Finnbogi Flateyjarbók, p. 50, 52, 53, 62, 68, 69 Flóamanna saga, p. 19 Fostbroeðra saga, p. 134 Fredskild, Bent, p. 11 Freydis Eiriksdottir, p. 56, 57, 65 Friðrekr byskup, i.e. Fridrek the Bishop, p. 54

GAD, FINN, p. 10, 21, 22, 30, 31, 38, 39, 55, 63, 67 GERTZ, M. Cl., p. 33 Gesta Hammaburgensis etc.—see Adam of Bremen Giraldus Cambrensis, p. 37 GIZORI, i.e. GIZURR ISLEIFSSON HVITI, p. 131 GIZURR HVITI from Skálholt, i.e. Is-LEIF's father, p. 14 Gobmundr Porgeirsson, Lawspeaker, p. 27 Grágás, p. 60, 64, 104 GREGOR I, Pope (590-604), p. 28 GREGOR of Tours, medieval historian, p. 16 Gripla, p. 69 Gronlandia antiqua, p. 8 Groenlandinga saga, p.41, 49-67, 141, 142 Groenlendinga pattr — i.e. Einars pattr

Gulatingslag, p. 60 Gunnlaugr Leifsson, i.e. the writer of Saga Ólafs Tryggvasonar, p. 33, 51, 59 Gunnlaugs saga Ormstunga, p. 49

cumming sugar comments, p., p. -

Hafgerðingadrápa, p. 62 Hafliði Másson, p. 131

Sokkasonar, p. 54, 68

Grænlands Annálar, p. 68, 69, 72

GUDRID, p. 51, 52, 56, 57, 58, 64, 65

GUÐMUNDSSON, VALTYR, p. 86

Нака and Нжкја, р. 58, 63 Hakon, bishop of Bergen, p. 70 HAKON HAKONSSON, king of Norway, (Hakon Hakonsson's saga), p. 134 HAMILTON, J. R. C., p. 80, 86 HARALD HARDRADA, King of Norway, p. 24 HARALD HARFAGER, King of Norway, p. 7 HAUKR ERLENDSSON, p. 49, 50, 66, 67, 131, 132, 135, 136, 137 Hauksbók, p. 38, 49, 50, 53, 54, 55, 58, 59, 66, 72, 131, 132, 135–38 Heimskringla, p. 26, 27, 43, 47, 52, 53, 59, 62, 66 HELGASON, JON, p. 47, 133 Helge Porbrandsson: settles Alptafjord, p. 55 Helgi and Finnbogi, p. 65 HENRICHSEN, C. L., p. 18 Henry III, Emperor of Germany, (1039-1056), p. 13, 14, 128 HERJOLF BARDARSON: settles Herjolfnes, p. 52 HERMANNSSON, HALLDÓR, p. 49, 51, 53, 59, 61 HEUSLER, ANDREAS, p. 43 HIERONYMUS, p. 16 Historia Ecclesiastica—see Bede Historia Norvegiae, p. 23, 24, 25, 32-40, 60, 65, 125, 140 Historia Vinlandia Antiquæ, p. 8 HOLBEK, BENGT, p. 29, 38, 39 HOLM, GUSTAV, p. 8, 71, 96, 109 HOLTSMARK, ANNE, p. 26 Honorius Augustodunensis, p. 34, 37 Hrafnkels saga, p. 44 Huitfeldt, Arild, p. 23 Hungreaka, p. 14, 128 НÆКЈА—see НАКА and НÆКЈА

Iffuer Bardsen—see Ívar Bardarson
Isidor of Sevilla, p. 36
Ísleifr Gizurarson, Islandic bishop, p. 14, 19, 20, 22, 23, 37, 128, 139
Ísleifs Pattr biskups, i.e. in Byskupa Sögur, p. 14
Íslendingabók, p. 18, 26–31, 37, 40, 65, 125, 128–33, 136, 140

Ívar Barðarson, Greenlandic clerical, p. 29, 53, 55, 56, 58, 68, 69, 70, 71, 72, 98, 99, 106, 108, 118, 119, 126, 142 Ivarus Barderi—see Ívar Barðarson

IVERSEN, JOHANNES, p. 98, 124

Jansson, S. B. F., p. 49, 50, 52, 54, 55, 58, 59
Jessen, C. A. E., p. 45
Jóhannesson, Jón, p. 42, 46, 51, 52, 58, 59, 131, 132, 136, 137, 138
Jón Arnasson Smyrill, p. 116, 118
Jón Erlendsson, Icelandic vicar, p. 26, 135
Jón Þorðarson, Icelandic alderman, p. 50, 53, 54, 62, 64
Jones, Gwyn, p. 52, 57, 62
Jónsson, Finnur, p. 26, 32, 33, 49, 50, 53, 55, 56, 61, 62, 68, 69, 70, 71, 72, 119, 130, 132, 134, 135, 136, 137

Karlsefni—see Þorfinn Karlsefni Ketill, Islandic bishop, p. 26 Ketill: settles Ketillsfjord Knuth, Eigil, p. 30, 97 Koch, Hal, p. 13 Koht, Halvdan, p. 24, 33, 34, 47 Kolskeggr, the Learned, p. 132 Konungs Skuggsjá, p. 8, 20, 39, 126 Kristni saga, p. 26, 54, 56, 59, 128 Krogh, Knud J., p. 9, 20, 52, 60, 62, 64, 80, 81, 102, 103, 104 Kålund, Kristian, p. 49, 66

Landnámabók Islands, i.e. the Book of the Settlements, p. 8, 30, 31, 41, 42, 46, 47, 48, 51, 54, 55, 57, 66, 67, 68, 71, 100, 125, 131–33, 135–38, 140 Landnámabók Skarðsarbók, i.e. a version of Landnámabók, p. 135–38 Lárusson, M. Mar, p. 105 Lárusson, Ólafur, p. 64 LEIF EIRIKSSON (the Lucky), p. 51, 52, 56, 59, 62, 63, 65, 66, 67, 142 Leo IX, Pope (1049-54), p. 12, 128 LIBENTIUS, archbishop of Bremen, p. 129 Lie, H., p. 44 LIEMAR, archbishop of Bremen, p. 13, 15, 16, 131

LIESTØL, KNUT, p. 43, 44 LIUTGAR, p. 16 LÖNBORG, SVEN, p. 18

Macrob, p. 36

Magnus Barfod, king of Norway, p. 25

Magnus Þórhallsson, p. 50, 52, 54

Magnussen, Arni, p. 131

Martianus Capella, p. 20

Maurer, Konrad, p. 33

Meinhard, Bishop, p. 23

Meissner, Rudolf, p. 33

Melabók, i.e. a version of Landnámabók, p. 135–38

Meldgaard, Jørgen, p. 50, 73, 98, 124

Mogk, Eugen, p. 33

Moltke, Erik, p. 81, 83, 100, 122

Munch, P. A., p. 32, 33

Nansen, Fritjof, p. 14, 29, 38, 72 Nennus, p. 37 Nicolaus I, Pope 858-67, p. 12 Nielsen, Niels, p. 122 Njala, i.e. Njals saga, p. 44, 134 Nordal, Sigurður, p. 33, 41, 42, 44, 46, 47, 51, 54, 134 Nottarp, Hermann, p. 23 Nørlund, Poul, p. 9, 10, 22, 29, 38, 55, 71, 79, 80, 84, 86, 91, 92, 96, 100, 105, 106, 111, 112, 114, 115, 116, 117, 118, 119, 120, 122, 123

Oddr Kolsson, p. 27 Oddr Snorrason (the writer of Saga Óláfs Tryggvasonar), p. 26, 33, 50, Olav den Hellige, King of Norway, i.e. St. Olav, p. 32, 33, 50 ÓLAF TRYGGVASON, King of Norway, p. 36, 40, 53, 59, 62, 66, 128, 129, 130, 140, 142 Olaus Magnus, p. 38 ÓLSEN, B. M., p. 54, 131, 132, 134, 136, 137 Olsen, Magnus, p. 73 Olsen, Olaf, p. 44, 45, 46, 137 ORDERICUS VITALIS, p. 19, 25 Orosius, p. 18, 24 Отто III, Emperor of Germany, p. 130

Paulus, p. 22
Peter of Husastad, p. 33
Petersen, Jan, p. 80, 85
Petersen, Robert, p. 29
Piø, Jørn, p. 38, 39
Pliny, The Older, p. 39
Pseudo-Isidor, p. 46
Pytheas of Massalia, p. 18
Paasche, Frederik, p. 14

RIMBERT, p. 16
ROSENKRANTZ, ALFRED, p. 11
ROUSSEL, AAGE, p. 9, 75, 76, 77, 80, 81, 85, 86, 87, 88, 89, 91, 93, 94, 95, 96, 97, 98, 100, 101, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 119, 120, 122
RÆSTAD, A., p. 24

Saga Ólafs Tryggvasonar, p. 26 Sallust, p. 19 Saxo, mediaeval Historian, p. 17 SCHMEIDLER, BERNHARD, p. 12-24, 128, 129, 130 Sigfusson, Björn, p. 128, 130, 131 Skálholtbók, p. 49, 58 Skalhóltannaler, p. 78 Skarðsarbók, i.e. version of Landnámabók, p. 136-138 SKARD, E., p. 33, 34, 37 SKJALD-HELGE, p. 72 Skovgaard-Petersen, Inge, p. 11, 63 SNORRI, SON OF KARLSEFNI, p. 57 Snorri Markusson, p. 135 Snorri Sturluson, p. 26 Snorri Þorbrandsson, p. 55, 59 Solinus, p. 18, 19, 34, 39 Soromanuscript, p. 34, 37 STEINNES, ASGAUT, p. 32, 33, 34, 70 STENBERGER, MARTEN, p. 80, 81, 84, 86, 96, 100, 105, 111, 114 STORM, GUSTAV, p. 24, 27, 32, 33, 36, 49, 50, 54, 57, 58, 64 STURLA PORDARSON, the Lawman, p. 47, 54, 135, 136, 137 Sturlubók, i.e. a version of Landnámabók, p. 51, 53, 54, 55, 56, 62, 66, 132, 135 - 38

Sturlunga saga, p. 57, 134

the Learned, p. 136

STYRMIR FRODI KARASON, i.e. STYRMIR

Styrmisbók, i.e. a version of Landnámabók, p. 54, 136–38
Sveinsson, E. O., p. 42, 43, 44, 45, 46, 59, 134, 136, 137
Sven Estridsen, King of Denmark, p. 14, 16, 17, 19
Sven Tveskæg, King of Denmark, p. 129, 130
Sverri's saga, p. 47
Sæmundr Sigfusson, the Learned, p. 26, 27, 33, 128, 134

T, see also P Theodoricus Monachus, p. 33 Тнов, р. 100, 143 THORBJØRN VIFILSSON, p. 58, 65 THORVALD EIRIKSSON, p. 56, 57, 63, 64 TJODHILDE, see also Tjodhilde's church, p. 9, 56, 59, 102 Tordis' Pattr, p. 72 TORFÆUS, THORMOD, p. 8, 50 Torgest, p. 56 TORHALL, Icelandic farmer, p. 58 Torstein Eiriksson, p. 56, 57, 60, 63, 64 Torvard, marries Freydis, p. 57 Tristams saga, p. 134 TROMMER, AAGE, p. 16, 17 Tyrker, a German, p. 63

Vandvik, Eirik, p. 8
Vebæk, Christian Leif, p. 9, 56, 68, 70, 81, 83, 90, 91, 92, 93, 96, 104, 111, 118, 119, 120
Vedel, Anders Sørensen, p. 129
Victor II, Pope (1055–57), p. 13
Vigfusson, Guðbranður, p. 49
Virgil, p. 16
Vita Sancti Cudbercti, see Bede

WEIBULL, L., p. 17, 45 WILLIBROR, p. 16 WOLFE, MICHAEL, p. 11

Þ, see also T
ÞORBJORN GLORA: settles Siglufjord, p. 55
ÞORBJÖRG LITILLVÖLVA, a seress, p. 58
ÞOrðarbók, i.e. a version of Landnámabók, p. 132, 135–38
ÞORÐARSON, M., p. 49, 51, 52 Porder, bishop in Gardar, p. 72
Pordur Jónsson, p. 136
Porfinn Karlsefni, p. 51, 57, 58, 60, 64, 65, 66
Porfinns saga Karlsefnis, i.e. Eiriks saga Rauda, p. 49
Porgeir Porkelsson, Lawspeaker, p. 129
Porgils Oddason, p. 131

PORHALL VEIDEMADR, p. 59, 61
PORKELL FARSEKR, p. 54, 100
PORKELL GELLISSON, p. 27, 28, 30
PORLAKR KUNOLFSSON, Icelandic bishop, p. 27
PORSTEIN, farmer in the Western Settlement, p. 27
PORSTEINSSON, BJÖRN, p. 57, 58
PORVALDR KOÐRANSSON, p. 54

### INDEX OF PLACE NAMES

Agdluitsup kangerdlua, p. 74 Agdlumersat, p. 75 Agnarfirði, i.e. Agnarfjord-Norse locality, p. 68 Alaburg, i.e. Alborg in Denmark, p. 19 Alptafjord—Norse name, p. 55 Ameragdla, p. 97, 98 Ameralik, p. 75 Anavik, Norse locality, p. 68, 108, 109, 114, 115 Andafjord, Norse locality, p. 69 Aros, Norse locality, p. 71, 119, 120 Austfirði, i.e. Austfjord—Norse locality, p. 65, 68 Austkarsfjord, Norse locality, p. 69 Austmannadalen, p. 9, 94, 97, 123

Baffin Land, p. 63 Bergen, p. 19, 33, 64, 70, 72 Bjarney, Norse locality, p. 58 Bjørnefælden, p. 73 Bjarmeland, Norse locality, p. 7, 35 Borgarfirði, i.e. Borgarfjord in Iceland, p. 54, 64, 132, 135 Brattahlid, Norse locality, p. 9, 20, 52, 56, 57, 60, 61, 65, 66, 68, 72, 76, 77, 84, 92, 93, 95, 96, 100, 103, 105, 108, 109, 112, 114, 115, 124, 141 Breiðafirði, i.e. Breiðafjord in Iceland, p. 26, 28, 49, 54, 132 Bremen, p. 14, 15, 16, 21, 22, 23, 64 Buksefjord, p. 75 Bær, site in Iceland, p. 64

Caithness, p. 85 Corbie, monastery in Germany, p. 16

Davis Strait, p. 74 Disko Bugt, p. 72 Dyrnes, Norse locality, p. 72, 111, 112 Eastern Settlement, the, p. 8, 9, 29, 53, 56, 65, 68–127, 143
Eidfjord Church in Norway, p. 112
Einarsfirδi—i.e. Einarsfjord—Norse locality, p. 68, 72, 75
Eiriksey—Norse locality, (literary construction?), p. 53
Eiriksfjord—Norse locality, p. 29, 56, 64, 65, 68, 69, 72, 74, 141
Eirikshólmar—Norse locality, (literary construction?), p. 56
Eqaluit, p. 75, 92
Eystribygd, i.e. The Eastern Settlement

Faeroes—Faeroe Islands, p. 7, 34, 40 Fiskenæsfjorden, p. 75 Freswick in Scotland, p. 85 Fulda—monastery in France, p. 16

Gardar-the Norse episcopal see in Greenland, p. 9, 40, 61, 68, 70, 72, 89, 95, 105, 109, 112, 115, 116, 117, 118, 120, 122, 124 Gardarnes—Norse locality, p. 68 Glaumbæjarland—in Iceland, p. 57 Godthåb, p. 9, 68 Godthåbsfjord, p. 75 Gröf-farm site in Iceland, p. 91 Halagland, i.e. Hålogaland in Norway, p. 16, 24, 35, 63 Hamburg-Bremen—Archdiocese, p. 12, 13, 14, 15, 22, 23, 139 Harðsteinaberg—Norse locality, p. 68 Haukadal—in Iceland, p. 28 Hebrides, the—see Suðereyjar Hekla—vulcano in Iceland, p. 86 Helluland—Norse locality in America (?), p. 56, 66 Henø—Norse locality, p. 53

Herey—synonymous with Henø (?), p. 53 Herfurda, *i.e.* Herford in Germany,

p. 14

Herjolfsfirði, *i.e.* Herjolfsfjord—Norse locality, p. 68, 69

Herjolfsnes—Norse locality, p. 9, 62, 63, 65, 68, 72, 91, 100, 106, 109, 112, 120, 122

Hitarðalur—site in Iceland, p. 136 Hjaltland, i.e. Shetland, p. 7, 40, 88 Hólar, diocese in Iceland, p. 26, 37, 64 Hóp—Norse locality in America (?), p. 58

Hóp—Norse locality in Greenland, p. 68Hrafnsfjord—Norse locality, p. 56, 72,75

Hvalsey—Norse locality, p. 9, 54, 72, 75, 76, 86, 87, 100, 109, 111, 112, 113, 115, 122

Hvarfsgnipu-Norse locality, p. 56

Iceland, p. 7, 12, 14, 16, 17, 19, 20, 22, 23, 24, 25, 26, 28, 30, 31, 34, 36, 37, 40, 41, 45, 46, 47, 48, 49, 54, 55, 56, 57, 58, 60, 66, 78, 79, 84, 91, 98, 101, 120, 121, 128, 132, 135, 136, 139, 141, 143, 144

Igaliko, p. 74, 79, 89, 92, 96, 111

Ikigait, p. 106

Inoqutseq, p. 104

Isofinitian Isofiord—Norse locality

Isafirði, *i.e.* Isafjord—Norse locality, p. 68, 74
Island, *i.e.* Iceland
Ivigtut, p. 68

Jakobshavn, p. 38 Jarlshof, p. 85 Julianehåb, p. 8, 68 Jæren—in Norway, p. 31

Kangersuneq Fjord, p. 95, 96, 97 Kap Farvel, p. 56, 74 Ketilsfirði, *i.e.* Ketilsfjord—Norse locality, p. 68, 69, 71, 118, 119 Kingigtorssuaq, p. 73 Kjalarnes—Norse locality in Vinland, p. 56, 63 Krossanes—Norse locality in Markland, p. 63

Krogsfjordshede-Norse locality, p. 38

Lichtenau Fjord, p. 74 Lysekloster—monastery in Norway, p. 117 Lysufirði—*i.e.* Lysefjord—Norse locality, p. 68, 69

Markland—Norse locality in America, p. 20, 56, 66, 78

Mellembygden—i.e. The Middle Settlement—the northern part of The Eastern Settlement

Middle Settlement, the, p. 68, 70, 74 Midfjord—Norse locality, p. 68, 70

Nanortalik, p. 68 Narssaq, p. 29, 68, 81, 82, 83, 84, 85, 86, 111, 143 Narssarssuaq, p. 119 Naujat, p. 75 Nipáitsoq, p. 98 Nordlandet-in Iceland, p. 30, 49 Nordre Sermilik, p. 74, 129 Norðsetr-Norse locality, p. 38, 72, 73 North Farm, the—norse site in Vatnahverfi, p. 91, 93 Nûgssuaq, p. 73 Ófunndinnfjord—Norse locality, p. 69 Orchades, i.e. Orkney Islands, p. 7, 16, 21, 22, 23, 24, 25, 32, 34, 40 Óræfi——locality in Iceland, p. 91

Paderborn—diocese in Germany, p. 14 Petursvik—Norse locality, p. 74, 118, 119

Qagssiarssuk in Tunugdliarfik, p. 29, 77 Qagssiarssuk in Igaliko Fjord, p. 92 Qaqasiaq, p. 120 Qordlortoq, p. 104

Ragnafjörðr, i.e. Ragnafjord—Norse locality, p. 68, 69
Rampness Fjord—Norse locality, p. 118
Reynistaðr—convent in Iceland, p. 50, 57, 64
River Farm, the—farm on Brattahlid, p. 77, 92, 93, 100, 102
Rogaland—in Norway, p. 85

Sandnes—Norse locality, p. 9, 68, 72, 88, 95, 101, 108, 109

Sermermiut, p. 38 Shetland—see Hjaltland Siglufirði—i.e. Siglufjord—Norse locality, p. 68, 69 Sitdlisit, p. 111 Skagafjord-in Iceland, p. 50, 57 Skálholt-diocese in Iceland, p. 14, 27, 37, 49, 118, 137 Skaptafells sysla—in Iceland, p. 49 Skarðsa—locality in Iceland, p. 136 Skåne, i.e. Scania, p. 18 Snæfell—Norse locality, p. 56 Snæfellsnes—in Iceland, p. 49, 50, 56, Solarfjell—Norse locality, p. 68, 72, 111 South Farm, the—in Vatnahverfi, p. 93 Staðr—on Snæfellsnes, p. 26 Stensnes—i.e. Sandnes?, p. 72, 108 Stokkenes—Norse locality, p. 65 Store Svala, Storsheien-locality in Norway, p. 85 Straumfjord-Norse locality in Vinland, p. 58 Straumfjord—in Iceland, p. 78 Stöng—site in Iceland, p. 86 Suðereyjar, i.e. The Hebrides, p. 7, 34, 40, 59 Svalbard, p. 7

Tasermiut, p. 118, 119
Tasermiutsiaq, p. 119
Taserssuaq, lake, p. 120
Tasiussaq, p. 120
Thule, p. 73
Thyle—i.e. Iceland, p. 18, 19, 24, 40
Tingimiut, p. 124

Tjodhilde's church—literary construction, p. 9, 20, 59, 60, 64, 66, 72, 77, 102, 103, 104, 112, 120, 142, 143

Trondheim, p. 33, 34, 40

Trøndelag, p. 33

Tungmeralik, p. 96

Tunugdliarfik, p. 29, 74, 111

Ujarragssuit, p. 95, 97 Ûnartoq Fjord, p. 104, 118 Undir Höfda—Norse locality, p. 68, 92, 108, 109, 110, 111, 112, 118, 119 Upernavik, p. 72, 73

Vagar—Norse locality, p. 68, 72, 104, 118

Vatnahverfi—Norse locality, p. 9, 75, 78, 93, 96

Vatsdalr—Norse locality, p. 68, 119, 120

Vestlandet—in Iceland, p. 26, 30, 49

Vestribygd—see The Western Settlement

Vík—Norse locality, p. 68, 119, 120

Villingaholt—site in Iceland, p. 26

Vinland, p. 7, 16, 28, 29, 31, 37, 52, 53, 56, 57, 58, 59, 63, 65, 66, 67, 140

Western Settlement, the, p. 8, 9, 29, 53, 55, 56, 58, 60, 61, 62, 68–127, 143

Þingeyrar—monastery in Iceland, p. 50, 64 Þjórsarðalur—in Iceland, p. 86 Þykkvibærjar(klaustr)—in Iceland, p. 49

## Survey of investigated ruin groups in Norse Greenland.

Group No.	Norse Name	Eskimo Name	Locality	No. of ruins	Type of house	Excavated	Archaeologist & Date	Notes	Literature
Ø. 2	?	Tingimiut	N. Sermilik	23, incl. 4 pens	Passage-house	Dwelling & various stalls & outhouses	D. BRUUN, 1894	The excavation lasted 11 days! Corrected plan of dwelling in MoG. 89, 1, p. 152	
Ø. 14	?	Narsarssuaq	_	1 (large)	?	Southeast corner	D. BRUUN, 1894	Possibly a small farm. A few finds of steatite vessels, etc., from a small trial excavation	MoG. 16, p. 247
Ø. 17 a	?	Narssaq	Ilímaussaq	at least 10	Long-house	Dwelling, + 1 outhouse	С. L. Vebæk, 1954, 1958, & 1962	The earliest farm excavated to date (landnam's period). The canal system in the dwelling has several parallels (see text).	
Ø. 20	?	Tunarmiut	Tunugdliarfik	11	Long-house	Dwelling	D. Bruun, 1894	The excavation lasted 11 days! Few finds. Iron axe found 1910	MoG. 16, p. 263 et seq. MoG. 47, p. 319 et seq. MoG. 89,1, p. 150 et seq.
Ø. 28	Brattahlid (The South farm)	Igdlúngûjuk	_	13	Centralized farm	Dwelling	D. Bruun, 1894 Nørlund & Stenberger, 1932,	Dwelling = no.47 at Brattahlid. The farm comprises nos.46-58. Discussion among BRUUN, NØRLUND and ROUSSELL regarding function of the complex.	MoG. 88, 1, p. 92 et seq.
Ø. 28 a	Brattahlid (thing booths)	Qagssiarssuk	-	13		All	Nørlund, 1932	Comprises the ruins at Brattahlid nos. 32-44. They have long-fireplaces	
Ø. 29	Brattahlid (The River Farm)	-	-	12	Passage-house	All	D. Bruun, 1894 Nørlund, 1932	D. Bruun believed that this was Eirik Rauða's farm. Irrigation installations. Dwelling is not a typical passage-house. See illustration in text	MoG. 88, 1. MoG. 89, 1, pp. 44,
Ø. 29 a	Brattahlid (The socalled Eirik Rauða's Far	— m)	-	18 incl. 2 churches	a) Long-house b) Passage house	All	D. Bruun, 1894, Nørlund & Stenberger, 1932, K. Krogh, 1962-65	Comprises nos. 1–17 plus 59 = "Tjodhilde's church". Traces of earlier dwelling – long-house with curved long walls under present passagehouse. "EIRIK RAUDA'S Hall" is not a long-house. Irrigation canals on the croft.	MoG. 88, 1. MoG. 89, 1, pp. 42, 101, 118, 138, 197. Клодн, 1965.
Ø. 47	Gardar	Igaliko	Igaliko Fjord	45, incl. church, pens, etc.	a) Long-house b) Passage house	All	J. F. Jørgensen, 1839 D. Bruun 1894, M. Clemmensen, 1910 Nørlund, 1926	Episcopal residence originally a long- house (?); reconstructed as a passage- house with a large hall. Cowshed and barns of impressive dimensions. Un- certainty with respect to thing booths. Irrigation systems on the croft	dighed 1842–43, p. 340 et seq. MoG. <b>16</b> , p. 321.
Ø. 64 a	In Austfjord?	"Enoch's ruiner"	_	8, incl. pen	Centralized farm	All	С. L. Vевжк, 1939	Remains of earlier dwelling under present one. Not really an inland farm	
Ø. 64 c	In Austfjord ?		Igaliko Fjord	10	a) Long-house b) Passage house	All	С. L. Vевæк, 1939	Ruin 3 is also a dwelling! Relatively large separate stall complex. The farm was covered by up to ca. 3 m sand	

(continued)

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Group No.	Norse Name	Eskimo Name	Locality	No. of ruins	Type of house	Excavated	Archaeologist & Date	Notes	Literature
Ø. 66	Undir Höfda	Qagssisiarssuk		ca. 15 incl. church & pens	?	Almost all	Jørgensen, 1839 G. Holm, 1880 D. Bruun, 1894 M. Clemmensen, 1910 Roussell, 1935 Vebæk, 1939	Several of the sites were covered by shifting sand.  Broun excavated in dwelling etc.  CLEMMENSEN and ROUSSELL have investigated the church, the latter a stall complex as well Vebek excavated a pit whose function is unclear	MoG. 16, p. 308 et seq MoG. 47, p. 341 MoG. 89, 1, pp. 99, 118, 131, 135, 219
Ø. 70	In Vatnahverfi	-	-	7–8	Passage house	Dwelling, partly	Vевжк, 1950	Small dwelling. Good finds, i.a., an iron hammerhead. Excavation incomplete	
Ø. 71	-	Russip Kuva – 1) 13 1) Long-house Dwellings + stalls Vebæk, 1949-50 1) The North Farm. 2) The South Farm. Thus comprises two separate farm complexes							
Ø. 73	-	Qordlortorssûp tasia	Amitsuarssuk	ca. 14	Centralized farm (?)	A little in dwelling	G. Holm, 1880 D. Bruun, 1894	Exact determination of type of house doubtful	MoG. 6, p. 125. MoG. 16, p. 396 and p. 414. MoG. 89, 1, p. 80
Ø. 77	-	at Qagdlumiut	_	?	?	Trial excavation	Ногм, 1880	Ruin 6 may be a dwelling	MoG. 6, p. 122 et seq.
Ø. 78 a	In Hafgrimsfjord ???	Eqaluit	Igaliko fjord	6	Passage-house	Dwelling, partly	Vевжк, 1939	Vebek abandoned excavation of the dwelling, as it was badly collapsed and extension undeterminable	MoG. 90, 1, p. 7 et seq. Vевек, 1952. Vевек, 1953
Ø. 83	Hvalsey	Qaqortôq	Qaqortup imâ	15, incl. 1 pagan grave + church	a) Long-house? b) Passage-house	All, but dwelling unsatisfactory	CLEMMENSEN, 1910 Roussell, 1935	The dwelling may be a long-house, rebuilt later into a passage-house. Roussell found the dwelling	MoG. 47, p. 288 et seq. MoG. 89, 1, diverse chapters
Ø. 97	?	Qingua	Ûnartoq Fjord	?	?	Trial excavation	Ногм, 1880	On the basis of the investigations up till now the type cannot be determined	MoG. 6, p. 130
Ø. 111	Herjolfsnes	Ikigait	Amitsuarssuk	5, incl. church	Long-house ?	All but partly	Nørlund, 1921	Investigations up till now prevent identification of the type of dwelling — it is badly molested — the hall is better preserved	MoG. 89, 1, pp. 51, 110
Ø. 149	I.B.: Klaustr	Narssarssuaq	Ûnartoq Fjord	26	Long-house? extended	Dwelling + church, etc.	Vевжк, 1945, 1946 & 1948	Convent. Several of the buildings not investigated. The dwelling is badly collapsed	VEBÆK, 1953. KLNM VIII col. 538 et seq.
Ø. 167	In Vatnahverfi	"Abel's Farm"	Igaliko Fjord	15	Long-house     Centralized     farm	Dwellings + a few outhouses	Vевæк, 1950	Comprises two large, separate farm complexes. In addition a small 3 rooms house with, <i>i.a.</i> , sauna. The corpse of a Norseman was found in the stall passage in the centralized farm	
M. 10	?	Eqaluit	Arsuk Fjord	?	?	Dwelling	Vевжк, 1954	The collapsed sites gave no positive results	Vевжк, 1956
M. 15	?	Tigssaluk	Tigssalûp ilua	5-6	Long-house	Dwelling	Vebek, 1954 Inugsuk Eskimos had settled on the sites at a later date		Vевек, 1956
M. 21	?	Grønnedal	Arsuk Fjord	10-12	?	?	Vевжк, 1954	State of preservation very poor	op. cit.
V. 7	Anavik?	Ujaragssuit	Ujaragssuit Godthåbsfjord	10	Long-house	All	Roussell, 1932	Nothing published about this peculiar building. It has a long-fire	MoG. 89, 1, diverse chapters
V. 8	?	Puilassoq	-	8	Centralized farm	All	Roussell, 1934	The farm is isolated, but is located in a fertile area at the edge of a glacier	op. cit.
V. 15	?	Ûmîvik	Kangersuneq	8	?	Various trial excavations	Roussell, 1932	The type of house cannot be determined on the basis of trial excava-	

Survey of investigated ruin groups in Norse Greenland (continued).

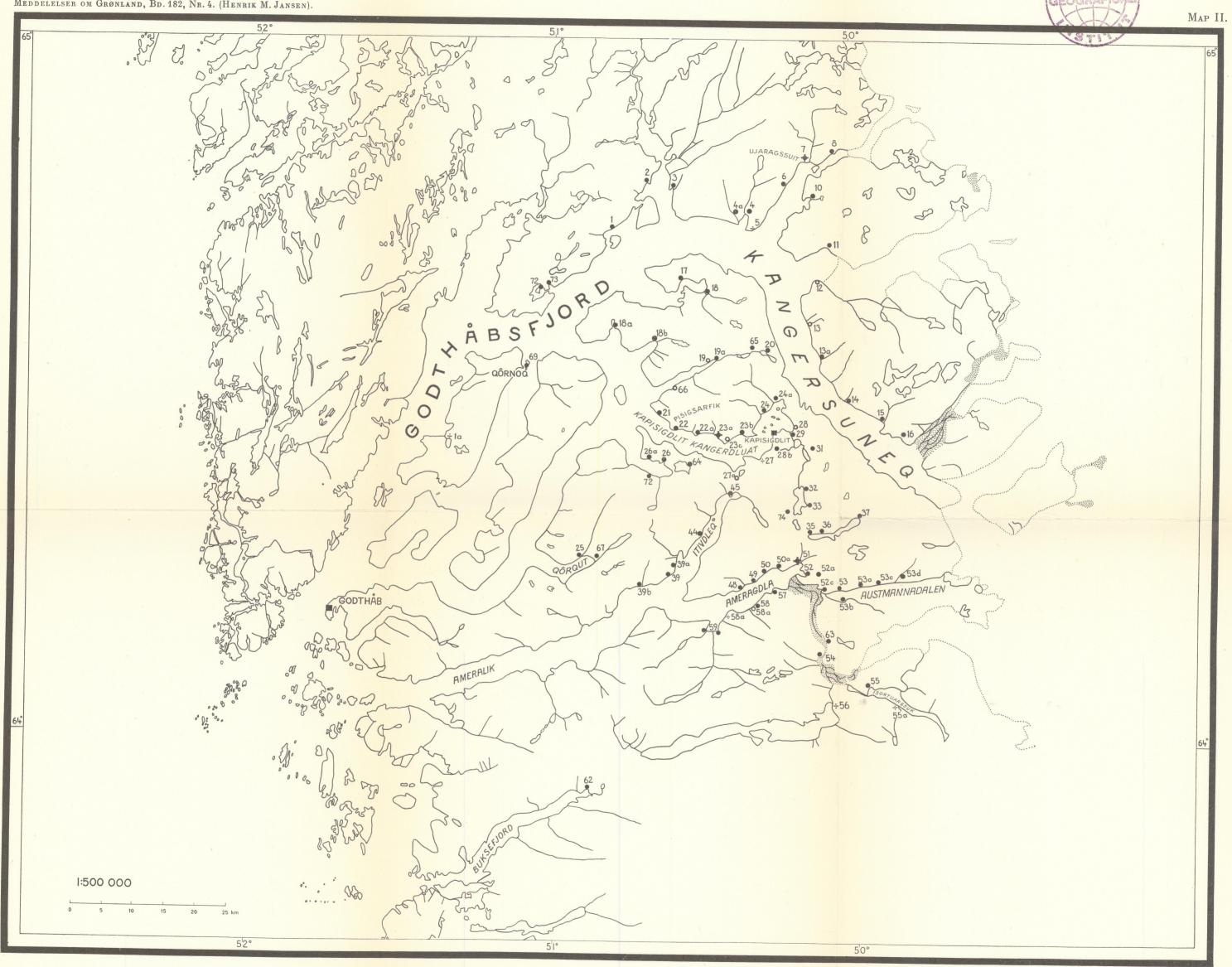
Group	27 27	Tiel 'ere Neme	Locality	No. of ruins	Type of house	Excavated	Archaeologist & Date	OGRAFISIE	Literature
No.	Norse Name	Eskimo Name	Locality	No. of ruins	Type of nouse	Excavated	Thenacologist to Daile		
V. 16	?	Sarqarssuaq	Kangersuneq	3	Centralized farm	All	Roussell, 1932	The farm is situated at more than 200 m a.s.l., and is the smallest of the farms in the Western Settlement investigated to date. Few finds	op. cit.
V. 17	?	Agdlerussat	Kangiussaq	?	?	Stall building	Meldgaard, 1966	R. BJØRGMOSE's theory that the place is identical with Stensnes cathedral brought about the investigation. The excavation showed that the postulated church was nothing but a cowshed!!	Meldgaard, 1966
V. 26 a	?	Sarfartussoq	Angmagssivik	?	?	?	AMATEURS, 1885	Only a few finds through excavation	MoG. <b>56</b> , p. 84
V. 29	?	Kapisilik	Pisigsarfik	?	Centralized farm (?)	?	-	Roussell identifies as possibly a centralized farm	MoG. 8, p. 114 Mog. 89, 1
V. 35	?	Tungmeralik	Ameragdla	5	Centralized farm	All	Roussell, 1937	No traces of the croft. Most likely the southern part of the site had burned down	MoG. 89, 1
V. 51	Sandnes?	Qilaussarfik	Ameralik	9, incl. pagan grave	Long-house	All	Nørlund & Roussell, 1932	Many good finds. Large stall complex. The church and churchyard had fallen into the sea. Existence of smithy proved	MoG. 89, 1, pp. 51, 131
V. 52 a	?	Umîviarssuk	Ameragdla	5 incl. pen	Centralized farm	All	Roussell, 1934	Discussion of navigation of Amerag- dla in the Middle Ages. Very well- preserved wooden artifacts. Finds of ship model and ship's planks in sauna. Rhenish stoneware. Remains of a long-house with curved corners under present house	MoG. 89, 1, pp. 13,
V. 53	?	Kûgssuaq/ Austmannadalen	-	1	?	Outhouse	Roussell, 1937	Mountain pasturing? Part of the complex, i.a., the dwelling, had fallen into the river. Few finds	MoG. 89, 1
V. 53 a	?		_	4	?	All	-	The house apparently had fallen into the river. Few finds	op. cit.
V. 53 c	?	_	_	10	Centralized farm	All	_	He believes that this house was similar to V. 51. It was the origin of the whole complex. Many finds were abandoned	MoG. 89, 1
V. 53 d	?	-	_	6	Centralized farm	All	_	The most copiously excavated farm in Greenland — 22 rooms. The southern part of the house had burned down; here the largest number of finds and the best-preserved ones were made, e.g., a crucifix from about 1300 (?). This house is also the result of a long period of development	
V. 54	?	_	-	? ,	Centralized farm	Trial excavation in dwelling	Meldgaard, 1952	The farm had burned down. Finds of Eskimo arrowheads on the site. Geological investigation of bogs indicated a drier climate immediately before or at the same time as the fire.	p. 90 et seq.
V. 69	?	Qôrnoq	Godthåbsfjord	?	?	Trial excavation	Meldgaard, 1952	The sites are covered by Eskimo ruins and graves	Not published. Report in Nat. Mus. archives

Group No. Ø. 18	Name in Norse Sources	Eskimo											
Ø. 18		Name	Locality	No. of buildings beside church	Archaeologist & Date	Measured by & Date	Type of church	Measurements of building	Church dike – Shape and measurements	Date	Churchyard area investigated + no. of graves & skeletons	Notes	Literature
	I.B.: Dyrnes Fltb: Hardsteinaberg (?)	Qusinga	Ilímaussaq	7 – farm with good surrounding area	l ÷	Nørlund, 1932	Rectangular? Nave and chancel same width (?)	Exterior: 15×8.75 m		12–1300 (?)	÷	I.B.: The largest parish on Greenland. The site is very collapsed. Determined by means of skeletal finds	MoG. 20, p. 265 et seq., MoG. 87, 1, p. 11 et seq. Vebæk, 1966 & 1968
Ø. 23	All: Undir solarfjöllum	Sitdlisit	Tunugdliarfik	6-7 = one farm	÷	BRUUN, 1894, VEBÆK, 1950	(?)	Exterior: 10×5-6 m	Rectangular: 20×18–19 m	- (?)	÷	Constructed of large flat sandstones (red). Badly collapsed. May be like $\emptyset$ 68	op. cit. & MoG. <b>16</b> , p. 273 et seq. Vebek 1966 & 1968
Ø. 29 a	A All: Brattahlid I. "Tjodhilde's church" mentioned in EsR, but is presumably fictitious	Qagssiarssuk	_	16 = "E.R.'s farm"	Ккобн, 1962-65	Ккобн, 1962-65	Earliest: Curved turf walls walls around wooden church. Straight gables; west gable. without protective wall.	Interior: ca. 2×3.5 m	Reconstruction not directly proved. Circu- lar. Diameter ca. 20 m	, 1000's	Whole area investigated.  144 determined.  Only coffins near the church	K. Krogh dates it on the basis of saga texts (!). The skeletons show no signs of serious diseases. Average height: women, ca. 156 cm. Men, ca. 171 cm	
-	op. cit. The topographical sources mention only one church on Brattahlid. Brattahlid II	- ,	-	-	Nørlund, 1932	Nørlund, 1932	Separate chancel & open west gable. Early plan.	Length: ca. 12 m. Width uncertain: exterior of nave ca. 8 m. Chancel ca. 7 m.	Not intact. Circular. Dia- meter ca. 20 m	Before 1200	ary graves. Skeletons poorly preserved, none investigated.	It was formerly believed that this type of church was a stone church with a wooden west gable. Krogh's new theory: wooden churches surrounded by stone & turf walls apart from west gable. Therefore no chancel arch jambs	89, 1, especially chap. III.
	op. cit. Brattahlid III	-	_	-		op. cit.	Rectangular stone church.	Exterior length 15 m., width 7.50 m (7.30 m in west end)		Roussell: beg. of 1200's, Krogh: about 1300	op. cit.	The exterior measurements give a proportion of 1:2. The same tall sill stones are observable at Herjolfsnes (Ø. 111), but the church belongs to the Hvalsey type (Ø. 83).	op. cit.
Ø. 33	?	Qordlortoq	-	14 = one farm	Ī	Nørlund, 1932	Earliest plan ??	÷, Nørlund: "a small heap of stones"	Octagonal (circular). Diameter: ca. 15–16 m	(?)	÷	Skeletal remains found as early as in the 1800's. Nørlund describes the church as a "private chapel", not a church proper.	
Ø. 35	?	Qordlortoq valley	-	?	÷	-	-	Interior: EW 3.50. NS 2.25	Circular. Diameter: ca. 17 m	-	÷	The church is more clearly defined than $\emptyset$ . 33	MoG. 88, 1, p. 13 et seq. Vевжк, 1966 & 1968
Ø. 47	Gardar I I.B.: The cathedral was consecrated to St. Nikolaus. The others simply state that it is situated in Einarsfjord	at .	Igaliko Fjord	43	Nørlund & Roussel, 1926	Roussell, 1926	Early plan. Chancel of same width as in earlier cruciform church, but is shorter. A still earlier church may be beneath this one	ca. 12.50 m.	Rectangular stone dike: NS ca. 32.50 EW ca. 48.80	Middle of 1100's ?	poor. SV corner investigated.	ROUSSELL dates it at the close of the 1100's. There may be an earlier church beneath this one. A "cloister garth" built of stone with mortar as a binding material, as well as the foundation of a bell tower (?) contemporaneous with this church	
_	Gardar II op. cit.		-	- A			Cruciform. Narrow chancel connected with nave. On both sides of chancel two small chapels later added. The nave must have had a wooden gable in its west end (open west gable)		op. cit. The present one presumably is contempora- neous with the cruciform church	Beg. of 13th Century	op. cit.	Constructed of the red Igaliko sandstone. Bishop's grave (Jon Smyrill?) in the north chancel. The side walls of the transept measure NS 7.70 m = width of chancel opening. Several burials in the church, some under the walls, <i>i.e.</i> , they are earlier than the church building.	op. cit.
Ø. 64	?		East arm of Igaliko Fjord	12	÷	Vевжк, 1962	Earliest plan ??	Exterior: 6.00×4.5 m	Polygonal. 19.5×23.5–24 n	??? n	÷, Yet finds of skeletal remains	The largest of the unidentified churches of the earliest type. Situated near Undir Höfda (Ø. 66).	Vевжк, 1966 & 1968
Ø. 66	Undir Höfda; ÷ I.B. Fltb: U.H. in Austfjord	Qaqssiarssuk	-		CLEMMENSEN, 1910 ROUSSELL, 1935	column	Rectangular, without separate chancel but with "open" west gable		Trapezoid. Length: ca. 32 m. Width: ca. 22.5 m	Roussell: Late Gothic	igated. Trial excavation by J. F. Jørgensen, 1839; G. Holm, 1880; D. Bruun, 1894; Aa. Roussell 1935. Only 5 skele-	It has not yet been possible to investigate this type of church satisfactorily. Ø. 149 and Ø. 18 may be parallels. Perhaps this is a wooden church surrounded by protective stone walls. Dating is extremely difficult on the basis of available material. An earlier church below!	

	·						Surveys of Chur	ches in Norse Greenlan	d (continued).				
Group No.	Name in Norse Sources	Eskimo Name	Locality	No. of buildings beside church	Archaeologist & Date	Measured by & Date	Type of Church	Measurements of building	Church dike – Shape and measurements	Date	Churchyard area investigated + no. of graves & skeletons	Notes GEOGRAFICIE	Literature
Ø. 78	In Hafgrimsfjord ???	Eqaluit	Igaliko Fjord	? – Large farm	÷	Vевжк 1951	Earliest plan ??	5.5-6.00×3.50 m	Circular. Diam.: 15–17 m	???	÷, yet finds of skeletal remains	Measurements of the church dike are un-	Vebæk, 1952. Vebæk, 1953, 1966 & 1968
Ø. 83	Hvalsey ÷ B.J.	Qaqortoq	Qaqortup ímâ		CLEMMENSEN 1910 and others	CLEMMENSEN 1910 Roussell 1935	Latest plan. Rectangular. In proportion ca. 1:2	16.10×7.95 m	Rectangular. $32.20 \times 25.75 \text{ m}$	ca. 1300	÷	The most well-preserved church ruin in Greenland. Some burials inside church de- termined, but the church floor has never been thoroughly investigated	MoG. 47
	Klaustr.? ÷ the Icelandic lists. I.B: monastery, Augustine Order.	Tasermi- utsaq	Tasermiut	7, incl. 3 pens	÷	Nørlund & Roussell 1926	Early plan, with separate chancel and nave and "open" west gable	Total exterior length: 11.75 m. Width of nave: 8.85 m. Width of chancel: 7.40 m	hexagonal E-W: ca. 41.5	Roussell: ca. 1200 ???	÷, yet finds of skeletal remains	The site in the eastern part of the church- yard. I believe it doubtful that this was a monastery church – see text	MoG. 89, 1
Ø. 111	Herjolfsnes ÷ I.B.	Ikigait	Amitsuarssuk	4	Nørlund 1921	Nørlund 1921	Early plan	Nave: 6.5 m. The church is surprising-	South part in the sea. Built of large stones, ca. 1.5–2 m wide E. & W. sides made of both		crosses, skeletons, and clothings 27 skeletons investigated by anthropologists, and degenera- tion hardly comes into questi-	Traces of earlier church demonstrated; burials that must be earlier than the present church found under both east and west ends. The chancel seemingly is not an addition, but the western foundation walls testify to an extension of the nave. Finds in the churchyard that are as late as ca. 1450–1500 2 coffins inside church, and 20 close by it; farthest away burials without coffins	MoG. 89, 1; Nørlund 1927 p. 385 et seg
	?: I.B.: Pettersvik. Fltb.: Vatsdalr. ?	Qáqatsiaq	Taserssuaq	5-6	÷	Nørlund 1926	?	Not measured. Badly collapsed	Not measured	?	A single trial trench revealed no skeletons, but sporadically dug-up earth!	The two names are scarcely identical; more likely Petersvik = Vik and Vatsdalr = (?) Aros. All names connected with the same fjord. Hardly any church on this site!	Nørlund, 1928, p. 46 et seq., Vebæk, 1966 & 1968
Ø. 149	Only I.B. Klaustr. Benedictine Order nuns.	Narssar- ssuaq	Ûnartoq Fjord	25	Vевæк 1945, 46, & 48	Vевжк 1945–46 & 1948	Rectangular, but with "open" west gable. Constructed of large and small boulders without dressing, by dry wall technique.		Rectangular. Ca. 29×24 m	12–1300 ??	Small part of the churchyard investigated. Mass graves. An-	It is extremely difficult to date the entire church/nunnery complex; there is no satis- factory explanation as yet. No scholarly publications to date. The church looks like	Vевжк, 1953 KLNM VIII cols. 538–39
Ø. 162		Narssaq	-	?	÷		Earliest plan ??	Ca. 9×6 m	Circular. Diam.: ca. 22 m	???	÷, yet traces of skeletons	In view of the church's plan, this can scar- cely be the one mentioned in the sources; the find presumably is a farm church (cha- pel)	Vевжк, 1966 & 1968
	Anavik? ÷ I.B.		Ujaragssuit	9	Roussell 1932	Roussell 1932	Latest plan	Exterior: Length 13.90. Width in E. 6.80 m. In W. ca. 6 m	Trapezoid. 22×28 m Built of large stones	Ca. 1300	tons & a few separate bones	Earliest plan (cp. Hvalsey). There was a thick cultural layer under the church, but until now no trace of earlier building. Clay was used as binding material	MoG. 89, 1 various chapters
_	In Andafjord ? ÷ I.B.	Qaqssinguit		? Large farm	÷	Nørlund & Roussell 1930	??	??	Rectangular. Disturbed by Eskimos	??	Trial excavation showed 5 dif- ferent layers. Skeletons very destroyed	Eskimo ruins have disturbed church and churchyard. To date very unsatisfactory investigations!	MoG. 89, 1, p. 98
V. 51	Sandnes (?) – I.B.: Stensnes ???	Qilaussarfik	Ameralik	9	Roussel 1932	Roussell 1932	Early plan	Chancel: Exterior width: 6.50 m Exterior length: 5.20 m Interior width: 3.25 m		Addition of Gothic chancel. Nave from 1100's (?)	Because of the present placement of the churchyard only 26 m <sup>2</sup> investigated. Secondary graves have disturbed many burials. Anthropologists have investigated 55 skeletons	Church and churchyard are now down in the sea; therefore no satisfactory results. Yet it can be proved with certainty that the chancel is earlier than the nave, and that this reconstruction must have taken place after the Roman foot had been abandoned as a unit of measurement in favor of the Greek foot	MoG. 88, 2, MoG. 89, 1



Black dot: farm.
Black dot with cross: farm with church.
White dot: other Norse buildings.
The numbers refer to the National Museum's Index to Records. (C. L. Vebek del.).



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