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Marckalada.

The first mention of America in the Mediterranean area (c.1340)

The *Cronica universalis* written by the Milanese friar Galvaneus de la Flamma (in Italian, Galvano Fiamma, † c.1345) contains astonishing mentions of Greenland, an island at that time virtually unknown in the Mediterranean area, and of a *terra que dicitur Marckalada*, situated west of Greenland. This land is recognizable as the *Markland* mentioned by some Icelandic sources, and identified by scholars as the Atlantic coast of Labrador or Newfoundland. Galvaneus's references, likely derived from oral sources heard in Genoa, are the first mentions of the American continent in the Mediterranean region, and give evidence of early circulation, outside the Nordic area, of information about north-western lands beyond Iceland.

Galvaneus de la Flamma was a Dominican friar, who lived in Milan and was connected to the Visconti family, which held at the time the lordship of the city¹. He wrote several literary works in Latin, mainly on historical subjects. His testimony is effective on Milanese contemporary facts, about which he has a first-hand knowledge; however, when Galvaneus deals with the past or with non-Milanese contexts, he gathers different information with little critical judgment, and his worth as a historian is dependent on the sources he exploits². The *Cronica universalis* is thought to be one of his later works, perhaps the last one, and was left unfinished and unperfected; the approximate date is 1339-1345. The original plan, set out in the prologue, envisaged including the history of the whole world from the Creation to Galvaneus's times, in 15 books. However, the actual work is significantly shorter than previously announced: the narrative stops in the middle of book IV, ending with the biblical king Joas (*IV Kings* 11-12). There is no evidence that any further sections were ever written³.

In 2013, Sante Ambrogio Céngarle Parisi first identified Galvaneus's *Cronica universalis* and drew attention to it⁴. The work, written in Latin, is still unpublished; an edition is planned, in the context of a scholarly and educational programme promoted by the University of Milan⁵. It is preserved in a single manuscript held by a private owner, who kindly gave me permission to photograph it⁶. The manuscript was written in Milan at the very end of the 14th century by a copyist

named Pietro Ghioldi (*Petrus de Guioldis*), who was also responsible for transcribing other historical works by Galvaneus⁷; he apparently planned a complete edition of Flamma's chronicles, in several copies. The manuscripts of Galvaneus's works provided by Ghioldi are often defective, not so much because of his inadequacy as a copyist, but rather because he had to deal with inconsistent models: there is evidence that he used some work-in-progress manuscripts by Galvaneus himself, never finished, sometimes not easy to read, enriched by marginal notes and fly-leaves⁸. In this situation, Ghioldi made many mistakes in transcribing uncommon words (for example, personal and geographic names), and left open several problems in the general structure of the book (duplications of sentences, lack of chapter numbers, incongruous internal cross-references, etc.); however he was a professional copyist, hence quite correct where Latin wording was more easily understandable, or when the direct model was unambiguously readable. As a matter of fact, Ghioldi's attitude towards the text seems remarkably conservative⁹, and testifies in favour of his substantial fidelity to the model.

The mention of Greenland and Marckalada occurs in the third book, which includes the third age of humankind (from Abraham to David), according to the traditional Augustinian and Orosian partition. The narrative is structured on the grid of Biblical chronology, which Galvaneus complements with secular history and mythology. In addition to the chronologic plot, in the third book the writer inserts a long geographical excursus, mainly dealing with exotic areas: the Far East, Arctic lands, Oceanic islands, Africa¹⁰. His sources are both traditional ones (e.g. Isidorus and Solinus), and recent accounts of travellers, such as Marco Polo and Odoric of Pordenone¹¹. Sometimes he quotes uncommon works, such as the Epistolae of the Franciscan John of Montecorvino, missionary to China¹², and the *Tractatus de mappa* by the Genoese priest and cartographer John of Carignano, a treatise that for a long time was considered lost, but partially survives through Galvaneus's extracts¹³. The writer is also aware of the medieval scientific notions about climate zones, and is interested in theoretical discussions about the habitability of nontemperate lands; he considers both southern (sub equinoctiali) and northern lands (sub pollo [i.e. *polo*] *artico*), in order to demonstrate that people live there as well¹⁴. In this context he mentions two lands named Grolandia and Marckalada. Here is the text, with an English translation; in italics the most relevant passages, which we are going to discuss 15 .

<u>Et dicunt auctores</u> quod sub equinoctiali sunt montes altissimi, ubi sunt habitationes temperate ratione ventorum aut umbrarum montium, aut ratione hedifitiorum mirabilis grositiei, aut ratione cavernarum subterranearum in valibus. Sunt etiam sub equinoctiali multe insule valde temperate, vel ratione fluminum, vel ratione nemorum, vel ratione ventorum, vel propter alias aliquas causas nobis ignotas.

Et pari ratione sub pollo artico vel circa sunt habitationes, non obstante frigore permaximo, valde temperate, in tantum quod homines ibi mori non possunt, sicut patet de Ybernia. Et hoc evenit propter aliquas causas nobis occultas. Et de hoc expresse loquitur <u>Marchus Paulus</u> dicens quod est quoddam desertum magnum per XL dietas ubi nichil nascitur, nec granum, nec vinum, homines vivunt de venationibus avium et animalium et equitant cervos.

Postea versus tramontanam est mare occeanum, ubi sunt insule multe in quibus nascuntur falcones peregrini et gyrifalchi in maxima quantitate. Et iste insule sunt tantum versus tramontanam quod stella tramontana remanet a tergo versus meridiem. *Et dicunt marinarii qui conversantur in mari Datie et Norvegye quod ultra Norvegiam versus tramontanam est Yslandia. Et inde est insula dicta Grolandia ubi tramontana stat a tergo versus meridiem, ubi unus episcopus dominatur. Ibi non est granum nec vinum nec fructus, sed vivunt de lacte et carnibus et piscibus. Habent domus subterraneas in quibus habitant, nec audent clamare vel aliquem rumorem facere ne bestie eos audirent et devorarent. Ibi sunt ursi albi magni nimis, qui natant per mare et naufragos ad litus conducunt; ubi nascuntur falcones albi magni volatus qui mittuntur ad imperatorem Tartarorum de Kata. Inde versus occidens est terra quedam que dicitur Marckalada, ubi gigantes habitant et sunt hedifitia habentia lapides saxeos tam grandes quod nullus homo posset in hedifitio collocare nisi essent gygantes maximi. Ibi sunt arbores virides et animalia et aves multe nimis. Nec umquam fuit aliquis marinarius qui de ista terra nec de eius condictionibus aliquid scire potuerit pro certo.*

Ex his omnibus apparet quod sub pollo artico est habitatio.

[Our] <u>authorities</u> say that under the equator there are very high mountains, where there are temperate settlements, made possible by winds, or by the shadow of the mountains, or by the remarkable thickness of the walls, or by underground caves in valleys. At the equator there are also many islands that are truly temperate because of the rivers, or the marshes, or the winds, or for reasons that are unknown to us.

And for a similar reason there are settlements beneath or around the arctic pole, despite the very intense cold. These settlements are so temperate that people cannot die there: this fact is well known for Ireland¹⁶. The reasons why this happens are unknown to us. <u>Marco Polo</u> speaks explicitly about this, when he says that there is a certain desert 40 days across where nothing grows -- neither wheat nor wine -- but the people live by hunting birds and animals, and they ride deers.

Further northwards there is the Ocean, a sea with many islands where a great quantity of peregrine falcons and gyrfalcons live. These islands are located so far north that the Polar Star remains behind you, towards the South. Sailors who frequent the seas of Denmark and Norway say that northwards, beyond Norway, there is Iceland; further ahead there is an island named Grolandia, where the Polar Star remains behind you, towards the South. The governor of this island is a bishop. In this land there is neither wheat nor wine nor fruit; people live on milk, meat and fish. They dwell in subterranean houses, and do not venture to speak loudly or to make any noise, for fear that wild animals hear and devour them. There live huge white bears, which swim in the sea and bring shipwrecked sailors to the

shore. There live white falcons capable of great flights, which are sent to the emperor of Katai. Further westwards there is another land, named Marckalada, where giants live; in this land there are buildings with such huge slabs of stone that nobody could build with them, except huge giants. There are also green trees, animals and a great quantity of birds. However, no sailor was ever able to know anything for sure about this land or about its features.

From all these facts it is clear that there are settlements at the arctic pole.

About the southern lands where people live, despite the supposed high temperature, Galvaneus is deriving his information from those whom he generically calls *auctores*: i.e. the geographic tradition passed to the Middle Ages from Late Antiquity, represented by Solinus and Isidorus, and – more recently – Bartholomaeus Anglicus, Peter of Abano, Benzo of Alessandria, and others. For what concerns the northern lands, the major authority is Marco Polo, explicitly quoted, and especially his description of the regions north of Qaraqorum, the royal city of the Mongols. We report the corresponding passage in the Latin translation (before 1320) of the Dominican friar Pipinus of Bologna: this very widespread version seems likely to have been the direct source of Galvaneus, who was a Dominican as well¹⁷.

Post discessum a civitate Corocoram et a monte Alchay, proceditur per aquilonarem plagam per campestria Bangu, que habent in longitudine XL dietas. Incole loci vocantur Mecrith, qui subiecti sunt Magno Kaam et habent Tartarorum mores. Sunt autem silvestres homines; carnibus vescuntur animalium que in venacionibus capiunt, et specialiter cervorum, de quibus copiam habent, quos etiam domesticant et factos domesticos equitant; blado carent et vino. In estate venacionem maximam habent avium et silvestrium animalium; hyeme vero animalia et volatilia cocta habent, et inde discedunt propter frigus maximum regionis illius.

Post terminum illarum XL dietarum pervenitur ad mare Occeanum, iuxta quod sunt montes in quibus herodii seu falcones peregrini nidos habent, qui inde ad Magni Kaam curiam deferuntur. In montibus illis nulle alie reperiuntur aves nisi herodii predicti et avium species altera que dicuntur bargelach, quibus pascuntur herodii: aves ille grandes sunt ut perdices, pedes papagallis similes, caudam vero habent ut rodii et sunt velocis magnique volatus. In insulis autem maris illius girfalchi nascuntur in multitudine maxima, qui ad Magnum Kaam deferuntur; girfalchi autem qui de christianorum terris deferuntur ad Tartaros non portantur ad Magnum Kaam, quia eis supra modum habundat, sed deferuntur ad Tartaros alios qui Armenis et Cumanis sunt affines.

In illis partibus insule sunt que tantum sunt ad acquilonem posite, quod polus articus, scilicet stella transmontana, est eis ad plagam meridionalem.

Nevertheless, a part of Galvaneus's narrative (the part we have highlighted in italics quoting the *Cronica universalis*) does not depend on Marco Polo. Our writer states that "sailors who frequent

the seas of Denmark and Norway" (*marinarii qui conversantur in mari Datie et Norvegye*) provide information about some lands of the far North: *Yslandia*, which is said to lie *ultra Norvegiam versus tramontanam*; then *Grolandia*, whose geographical position can be deduced by the adverb *inde* (namely "beyond *Yslandia* in the same direction") and which is described as the extreme North, where the Polar Star is left behind. Seafaring sources are also entitled to be the origin of the last passage, devoted to *Marckalada*, which lies west of *Grolandia*. Unlike the information about *Yslandia* and *Grolandia*, the news about *Marckalada* are admittedly vague: there is hearsay, but nothing for sure (*nec umquam fuit aliquis marinarius qui de ista terra nec de eius condictionibus aliquid scire potuerit pro certo*).

The existence of Iceland (*Yslandia*) was not unknown to the geographic culture of Medieval Europe; one of the most widespread and influential encyclopaedias of the time, the *De proprietatibus rerum* by Bartholomaeus Anglicus (also quoted by Galvaneus), devoted a paragraph to it¹⁸, and an island with a similar name is depicted in early cartographic documents, like the Cottonian world map¹⁹ and the al-Idrīsī world map²⁰. On the contrary, the names of the other two lands, *Grolandia* and *Marckalada*, are not found in any continental geographic treatise or map, at least until the 15th century²¹. While the reference to *Marckalada* in the *Cronica universalis* is unique, Galvaneus mentions *Grolandia* (in the alternative spelling *Gorlandia*, *Gronlandia*)²² a second time, within a list of islands located North or West of Ireland²³:

Insula dicta Thanatos.

Anglia insula habet iuxta, modico occeano interiecto, quandam insulam parvam que dicitur Thanatos, terra siquidem fertilis, habundans furmento. Ibi nullus serpens vivit sed terra illa quocumque portata serpentes interficit. Similiter dicitur de insulla Gallone que est in oriente iuxta populos Garamantes.

Insula dicta Gorlandia.

Ultra Yslandiam per miliaria fere M est insula dicta Gronlandia ubi nascuntur falcones albi et ursi albi. Ibi non nascitur nec granum nec vinum. Habundat piscibus et lacte. Et fere ad ipsos nullus est accessus; et navis que illuc semel vadit tot concutitur fluctibus quod numquam ulterius potest navigia perficere.

Insula Tyle posita sub pollo artico.

Sub pollo artico est insula dicta Tyle vel Tylen, de qua <u>dicit Solinus</u> quod non potest habitari, quia quanto tempore sol ab Ariete vadit in Libram per sex menses sol non videtur, per alios sex menses continue vident solem. Ultra hanc insulam secundum Solinum est mare pigrum et concretum.

Here a translation of the chapter on Gorlandia / Gronlandia:

The island named Gorlandia.

Beyond Iceland, travelling a thousand miles, there is an island named *Gronlandia*. In this land live white falcons and white bears; neither wheat nor wine grow there; there is plenty of fish and milk. It is almost impossible to reach this people: when a ship goes there, it is so much tossed by the waves, that it can not make any further sea voyage.

The chapters about *Thanatos* and *Thyle* are taken from Solinus's *Collectanea*²⁴, where they occur in succession; the chapter about *Gorlandia / Gronlandia* has no parallel in Solinus, or in any continental geographic treatise of the Middle Ages²⁵. Gathering together the information provided in both chapters, *Grolandia / Gorlandia / Gronlandia* is described as a land difficult to access and impossible to cultivate, populated by wild animals, whose inhabitants harvest food through hunting, fishing and poor husbandry, and lead a hard and miserable life in poverty and in constant fear.

The *Grolandia / Gorlandia / Gronlandia* which lies *ultra Yslandiam* can only be Greenland; the distance provided by Galvaneus (*miliaria fere M*) is sufficiently approximate, if calculated from the western coast of Iceland to the medieval "Eastern settlement" in Greenland, west of Cape Farewell. On two occasions Galvaneus qualifies this land as *insula* -- a notion that was not taken for granted at the time. Although Adam of Bremen, who provides the first historical mention of it, speaks of Greenland as an island²⁶, in the *Konungs Skuggsjá* (*King's Mirror*), an Old Norse *speculum* of the 13th century focused on the north-Atlantic area, the question of whether such land is mainland or an island is treated as controversial, and ultimately Greenland is considered mainland²⁷. South of the Alps, Greenland (as *Gronlant, Gronlandon, Gronlondia*) is mentioned only in the papal documents which granted jurisdiction over Scandinavia to the archbishops of Hamburg (dated 1053, 1055 and 1133), whose wording was obviously dictated by the archbishopric itself²⁸; there is no further evidence of more precise knowledge of this land.

Concerning the *terra que dicitur Marckalada* – not specifically defined *insula*, as Galvaneus does for Greenland –, no other land seems to be taken in account, except the *Markland* mentioned in a scant number of medieval sources, all emanating from Iceland²⁹ and all indeed placing it to the southwest of Greenland. Most of the slight differences in spelling between Galvaneus' *Marckalada* and the Icelandic *Markland* do not represent a problem³⁰; it is impossible to know if such differences derive from Galvaneus's sources, or if they should be ascribed to Galvaneus himself or to the copyist of the manuscript. As we said, Ghioldi often miswrote personal and geographical names he was not familiar with, but slavishly transcribed his model where the wording was plain. Apparently, this is the case: the copyist might have miswritten the name of the land, but there is no reason to think that he modified the rest of the sentence, a behaviour which would be unusual for him. The only element

of the spelling that strikes as odd is the grapheme -ck-, extremely rare in Italian manuscripts of the 14th century and unique in the whole *Cronica universalis*. The use of -ck- implies an anomalous pronunciation (strengthened or stressed) of the guttural sound; such an uncommon and isolated trait is unlikely to be a creation of Galvaneus or Ghioldi, and its singularity generates the suspect that it depends on the persistence of a previous source.

All the medieval Nordic sources reporting mention of *Markland* are well known to scholars; however, we shall briefly summarize them.

- 1) In the *Eiríks saga rauða* (*Eirik the Red's Saga*), *Markland* is mentioned twice. 1) The hero Thorfinn Karlsefni and his people, coming from *Helluland*, "sailed for two days before a northerly wind³¹ and sighted land ahead; this was a heavily-wooded country abounding with animals. There was an island to the Southeast, where they found bears, and so they named it *Bjarn Isle*; they named the wooded mainland itself *Markland*^{*32}. 2) Coming back from *Vinland*, Thorfinn Karlsefni and his people "set sail before a southerly wind and reached *Markland*, when they came upon five *skrælings* a bearded man, two women, and two children. Karlsefni and his men captured the two boys, but the others got away and sank down into the ground. They took the boys with them, taught them their own language, and baptized them. The boys said that their mother was called Vætild and their father Ovægir. The boys said that the land of the *skrælings* was ruled by two kings, one of whom was called Avaldamon and the other Valdidida. They said that there were no houses there and that people lived in caves or holes in the ground"³³. The text is preserved in the *Hauksbók* (AM 544 4^{to})³⁴, written in 1306-08³⁵, and in the *Skálholtsbók* (AM 557 4^{to}), written about 1420³⁶. The more recent manuscript is somewhat more conservative than the older one; the original text is thought to go back to the 13th century, although the narrative matter refers to the end of the 10th century.
- 2) In the *Grænlendinga Saga* (*Saga of the inhabitants of Greenland*), the hero Leif Eiriksson and his people, coming from *Helluland*, reached a country which is described as "flat and wooded land, with white sandy beaches wherever they went; and the land sloped gently down to the sea". Leif said: "This country shall be named after its natural resources: it shall be called *Markland*"³⁷. The oldest manuscript is the *Flateyjarbók* (Copenhagen, Det Kongelige Bibliotek, GKS 1005 fol.), completed in 1387³⁸; the original text is also thought to go back to the 13th century and the narrative matter to the end of the 10th century.
- 3) The Skálholtsannáll (Annals of Iceland; ms. AM 420 A 4^{to}, written in 1356 or later) for the year 1347 report this reference: "A craft came from Greenland which was smaller in size than small vessels that trade to Iceland. It came into the entrance of Straumfjörd [on the south side of Snæfellsnes, Iceland]. It had no anchor. There were seventeen men on board who had been on a voyage to *Markland* and later had been driven by gales to this land"³⁹. This information is recalled, with small changes, in the later *Gottskálksannáll* and *Flateyjarannáll*⁴⁰.

4) Markland is also mentioned in the description of the world (Heimslýsing; conventionally named Kurze Weltbeschreibung by Rudolf Simek) reported in the manuscript AM 736 I 4¹⁰ (written about 1300) and in some later witnesses⁴¹. The same description is also premised to the account of the journey (Leiðarvísir) by Nikulás Bergsson from Munkaþverá (oldest manuscript: AM 194 8^{vo}, late 14th century)⁴². This text says: "South from Greenland is Helluland, then Markland. Not far from there is Vinland; some people suppose that this land is an offshoot of Africa"⁴³. At the end of the passage, the version of the Leiðarvísir comments: "if this be so, then the outer ocean [i.e., the ocean surrounding the disk of the earth] must fall in between Vinland and Markland" – a sentence which is not found in the oldest manuscript of the Kurze Weltbeschreibung and is considered by scholars as a later addition. Other Nordic descriptions of the world, derived from the Kurze Weltbeschreibung, also contain similar information⁴⁴. These mentions of 'American' lands in Icelandic cosmographic treatises are thought to derive from the saga narratives: the adventure-genre is reduced into the fold of scientific literature⁴⁵.

All these scant sources are Icelandic; no mention of the name *Markland* has ever been reported outside of the Nordic area. Scholars agree in identifying *Markland* – just like *Vinland* and *Helluland* – as some parts of the Atlantic coast of North America, where Icelanders and Greenlanders made explorations and marginal settlements, as is demonstrated by archaeological evidence; *Markland* is usually assumed to be Labrador or Newfoundland, *Helluland* Baffin Island or Labrador, *Vinland* Newfoundland or some southern seaside⁴⁶. This is obviously a matter for specialists, and we do not dare to enter the field.

According to the sagas, *Markland* took its name from the forests and is supposed to mean "wooded land"⁴⁷. The *Marckalada* described by Galvaneus is also rich of trees (*ibi sunt arbores virides*), and animals live there, as in the *Markland* of *Eiríks saga rauða*. These details could be standard, as distinctive of any good land; but they are not trivial, because the common feature of northern regions is to be bleak and barren, as actually Greenland is in Galvaneus's account, or as Iceland is described by Adam of Bremen⁴⁸. However, other details are somewhat different from the image of *Markland* provided by the sagas. Galvaneus apparently contaminates traits which Nordic narratives connected to other lands, as is usual with hearsay. The *lapides saxei grandes* recall the description of *Helluland* in the *Eiríks saga rauða* and in *Grænlendinga Saga*: in this land Thorfinn Karlsefni "found many slabs of stones so huge that two men could stretch out on them sole to sole"⁴⁹. The giants who are said to inhabit *Marckalada* are common in Old Norse epic traditions, although they are usually reported to live north-eastward (and not westward); an exception is the *Bárðar saga Snæfellsáss*, which sets giant people in *Helluland*⁵⁰.

A similar contamination apparently occurs in Galvaneus's description of Greenland as well: the *domus subterranee* are similar to those where the *skrælings* escape after encountering Thorfinn Karlsefni in *Markland*, according to the *Eiríks saga rauða*⁵¹, or to the *subterranee spelunce* where the Icelanders dwell, according to Adam of Bremen⁵²; the *Eiríks saga rauða* also reports that *ursi albi magni* live in an island close to *Markland*⁵³. The lack of wheat and wine and the nourishment of the dwellers (milk, meat and fish) find a partial parallelism in Marco Polo's narrative (*carnibus vescuntur animalium... blado carent et vino*), as well as the information about the Polar Star startlingly visible southwards⁵⁴. The hint about the bishopric government of Greenland might echo what Adam of Bremen says of Iceland (*episcopum suum habent pro rege*)⁵⁵; as a matter of fact, however, a Greenlander bishopric is attested since ca. 1125: whatever its real authority⁵⁶, such office was probably the most recognizable and comparable form of jurisdiction for a foreigner.

Galvaneus is a writer who cares about indicating his sources. At the very beginning of the *Cronica universalis* – and of his other historiographical works –, he provides a 'bibliographic' list of the books that he exploited to assemble his treatise, also declaring the Milanese library where he consulted each of them. Moreover, he scrupulously indicates the source of every piece of information reported in the chronicle, quoting the name of each author within the text, and underlining it. For the items concerning Greenland and *Marckalada*, Galvaneus only refers to some generic *auctores* (for the non-specific discussion on habitability) and to Marco Polo, from whom – as we have already seen – he draws only part of the information; no other work fitting with similar contents is ever mentioned, neither in the text nor in the introductory 'bibliographic' list. Galvaneus does not quote Adam's *Gesta archiepiscoporum*, and is not likely to have known this work, which never circulated out of the north-European space. Moreover, in this passage he does not quote the *De proprietatibus rerum* by Bartholomaeus Anglicus, which he exploits elsewhere – the only encyclopaedic source available to him which partially dealt with north-western lands (namely Iceland).

Therefore, we should trust Galvaneus when he says that his information comes from an oral report (*dicunt*) by *marinarii qui conversantur in mari Datie et Norvegye*: had he had some written source at his disposal, he would have most likely declared it, in light of the stronger authority he would have drawn from it. As a matter of fact, the details he reports about Greenland are consistent with the interests and concerns of sailors: the position of the Polar Star, visible southwards⁵⁷; the unusual mention of white bears bringing shipwrecked sailors ashore, which seems to echo seafaring stories; the trade in birds of prey, very lucrative at the time⁵⁸; the difficulty to reach Greenlanders (*fere ad ipsos nullus est accessus*); the storming waves which damage the ships⁵⁹ and make them

impossible to use for a later voyage -- thus reducing the chances of their crew to make it back home. Another aspect compatible with oral sources is also the conflation of elements drawn from various stories, legendary or real, belonging to previous traditions on different lands, blended together and reassigned to a specific place.

Further evidence demonstrates Galvaneus's attention to oral sources, which he deems worthy of mention even in an erudite context such as the *Cronica universalis* – a remarkably original aspect of its geography. Although, as we said, his description of the Far East is based on travel written reports, in particular on those of Marco Polo, Odorico di Pordenone and John of Montecorvino⁶⁰, he also relates the information gathered from some *frater Symon predicator qui in partibus illis moram contraxit annis V*, otherwise unknown; Galvaneus explicitly states that *frater Symon*'s testimony is oral (*dicit, narrat, habui ex ore*)⁶¹. Furthermore, within the geographical section of the *Cronica universalis* we find a schematic representation of the terrestrial parallels, the cardinal points and the direction of the winds⁶². As a matter of fact, the table is based on scientific coordinates⁶³, but the scholarly names of the winds (*vulturnus, africus, favonius*, etc.) alternate with terms of seafaring origin (*lebeg, suroch, mezdi, levanth, ponenth, grecho*), certainly drawn from oral sources.

Who are the *marinarii* whom Galvaneus indicates as his source? Another isolated hint in the geographic part of the *Cronica universalis* suggests that Galvaneus was not unfamiliar with sailors' stories: speaking about some mountains with magnetic properties, he writes that their rocks *extrahunt... clavos de navi*, a detail absent in his written sources and evidently drawn from seafaring experience⁶⁴. Galvaneus, however, lived in Milan – an inland city, not exactly a customary destination for sailors. The most probable hypothesis, then, is that he is reporting first-hand or second-hand information coming from Genoa, the closest seaport to Milan. As a matter of fact, references to Genoese sources can be found elsewhere in the *Cronica universalis*. As we said, Galvaneus quotes the lost work of John of Carignano⁶⁵, which apparently had no diffusion outside of Genoa; moreover, he refers to some *mappa Ianuensis* -- seemingly a planisphere including the Asiatic continent -- as if he had it in his own hands⁶⁶. These two elements suggest that Galvaneus might have spent some time in Genoa, where he could consult the planisphere and gather excerpts from John of Carignano's booklet⁶⁷. Although such a stay is not demonstrable, it is highly plausible in the context of Galvaneus's life; conversely, there is absolutely no evidence of his hypothetic travels or contacts in northern Europe, nor proof that he ever utilised written or oral sources of that provenance.

Therefore, Galvaneus's *marinarii* were most likely Genoese, rather than Nordic; the Genoese were indeed the *marinarii* par excellence for the Milanese audience of the writer. Besides, the

portolan charts drawn in Genoa and in Catalonia during the 14th century – like the famous maps by John of Carignano himself⁶⁸ or by Angelino Dulceti, who is considered to be the link between Genoese cartographic practice and Majorca⁶⁹ – offer a more advanced geographic representation of the North⁷⁰, such as could be obtained through direct contacts with those regions⁷¹. A straightforward conclusion is that these notions about the North-West were acquired on the shipping routes to the British Isles and to the continental coasts of the North Sea. We have no evidence that Italian or Catalan seafarers ever reached Iceland or Greenland at that time; but they were certainly able to acquire from North-European merchants goods of that origin, to be transported to the Mediterranean area. The marinarii mentioned by Galvaneus could be a point in favour of this hypothesis: the Genoese might have brought back to their city scattered news about these lands, some real and some fanciful, that they heard in the northern harbours. In the 13th and 14th centuries the Genoese sailors travelled far and wide, from China to East Africa to inner Morocco: it would be rather strange for them to have avoided the nearer routes of northern Europe; and if they did sail North, they must have surely reported what they heard from other sailors (Scottish, British, Danish)⁷², useful information to possibly open up new commercial routes⁷³. The geographic treatise by 'Alī ibn Mūsā ibn Sa'īd al-Maghribī (written around 1250-70) gives evidence of the trade of 'white falcons' and 'white bears' from Northern Europe to the Mediterranean Sea:

Around it [Denmark] are small islands where falcons are found. To the West lies the island of white falcons, its length from West to East is about seven days and its breadth about four days, and from it and from the small northern islands are obtained the white falcons, which are brought from here to the Sultan of Egypt, who pays from his treasury 1000 dinars for them, and if the falcons arrive dead the reward is 500 dinars. And in their country is the white bear, which goes out into the sea and swims and catches fish, and these falcons seize what is left over by it, or what it has let alone. And on this they live, since there are no [other] flying creatures there on account of the severity of the frost. The skin of these bears is soft, and it is brought to the Egyptian lands as a gift⁷⁴.

The "island of white falcons" is supposed to be Iceland, known to Arabic geographers and represented, as we said, in the al-Idrīsī world map. Ibn Sa'īd does not indicate the nationality of the merchants who brought the birds to the Sultan of Egypt; however, it is hard to think that the Genoese totally neglected such a lucrative trade.

The news reported by Galvaneus about *Marckalada / Markland* – just like those about the less evanescent Greenland -- remain isolated, and there is no trace of their reception either in continental geographical treatises or in the subsequent cartography. No mention of these lands is found in the Genoese *mappae mundi* or portolans of the 14th century, nor in those produced in Majorca and Catalonia, closely linked with the Genoese tradition⁷⁵, although these maps make use of other notions

gathered from travellers and merchants⁷⁶. The rumours about the lands of the extreme North and extreme West were perhaps too vague and indirect to be translated into a geographical representation. The only, very dubious trace of *Markland* in Mediterranean cartography could be connected with Madeira, whose Portuguese name means "wooded land", "land of lumber": the sailors who travelled the Atlantic, vaguely aware of the presence of some wooded land located westwards (just like *Markland*), might have identified it with a recently discovered island⁷⁷. In addition to the etymology, an element in favour of this theory is the fact that Madeira entered the European geographical horizon in Galvaneus's time, around the middle of the 14th century, when it was reached (probably) just by Genoese navigators⁷⁸. On the other hand, however, Galvaneus's Marckalada is not exactly described as a "wooded land", but rather as a "fertile land" (with "green trees, animals and a great quantity of birds"), and the geographical location that he indicates (west of Greenland) apparently refers to a much more northerly area of the Atlantic than Madeira⁷⁹; moreover, such features are quite commonly evoked in toponyms, and therefore this correlation might be accidental. Nonetheless, the possibility that the reminiscences of an oral source have been applied to the newly discovered island cannot be definitively ruled out. As far as Greenland is concerned, its earliest cartographic mentions in the Mediterranean area⁸⁰ date back to the beginning of the 16th century and are too late to be significant⁸¹. Apparently, there is no trace of any further erudite or scientific reception of the "seafarers' rumours" reported by Galvaneus in his chronicle. This fact suggests a scenario of informality: the Genoese could exploit such notions for eventual commercial benefit, but they were too vague to find consistency of cartographic or scholarly representation⁸².

Despite its isolated position, Galvaneus's narrative bears witness to the circulation of geographic knowledge between the Nordic and the Mediterranean world in the first half of the 14th century. Furthermore, it brings unprecedented evidence to the speculation that news about the American continent, derived from Nordic sources, may have circulated in Mediterranean (most likely Genoese) seafarers' circles before Columbus. Long before Colombus: one and a half centuries before him, to be exact⁸³.

¹ On Galvaneus de la Flamma's biography and literary works see Thomas Kaeppeli, *Scriptores Ordinis Praedicatorum Medii Aevi*, II (Rome, 1975), 6-10; Jörg Busch, *Die Mailänder Geschichtsschreibung zwischen Arnulf und Galvaneus Flamma. Die Beschäftigung mit der Vergangenheit im Umfeld einer oberitalienichen Kommune vom späten 11. bis zum frühen 14. Jahrhundert* (Munich, 1997); Paolo Tomea, "Fiamma, Galvano", in *Dizionario biografico degli Italiani*, XLVII (Rome, 1997), 331–338; Id., "Per Galvano Fiamma", *Italia medioevale e umanistica* 39 (1996): 77–120; Vera Fravventura, "Galvanus Flamma", in *CALMA. Compendium Auctorum Latinorum Medii Aevi (500-1500)* IV.1 (Florence, 2012), 42–45; Riccardo Macchioro, "La *Chronica Danielis* nelle opere di Galvano Fiamma e nel *Manipulus florum*", in *Miscellanea Graecolatina* II (Milan, Rome, 2014), 133–182; Paolo Chiesa, "Galvano Fiamma fra storiografia e letteratura", in *Courts and Courtly Cultures in Early Modern Europe. Models and Languages* (Rome, 2016), 77–92; Id, "*Summa cronicarum*. Un'opera incompiuta e perduta di Galvano Fiamma", *Filologia mediolatina* 24 (2017): 305–321; Galvano Fiamma, *Chronica pontificum Mediolanensium*, ed. Federica Favero (Florence, 2018).

² For a recent survey on Galvaneus as historian, see Marino Zabbia, "La specificità del lavoro di storico secondo Galvano Fiamma", in *In presenza dell'autore. L'autorappresentazione come evoluzione della storiografia professionale tra basso Medioevo e Umanesimo* (Naples, 2018), 55–78; Federica Favero, "Ripensamenti e modifiche nelle cronache di Galvano Fiamma", forthcoming. See also Sharon Dale, "Fourteenth-Century Lombard Chronicles", in *Chronicling history. Chroniclers and historians in medieval and Renaissance Italy*, University Park PA, 171–196, focused on Galvaneus's attitude towards the Visconti family and contemporary events.

³ A description of Galvaneus's *Cronica universalis* in Paolo Chiesa, "Ystorie Biblie omnium sunt cronicarum fundamenta fortissima. La Cronica universalis di Galvano Fiamma (ms. New York, collezione privata)", *Bullettino dell'Istituto Storico Italiano per il Medioevo* 118 (2016): 179–216. ⁴ Sante Ambrogio Céngarle Parisi, "Introduzione", in *La Cronaca estravagante di Galvano Fiamma*, eds. Sante Ambrogio Céngarle Parisi and Massimiliano David (Milan, 2013), 1–196, at 43–45. Céngarle Parisi named the work *Cronaca Bianchiniana*, from a previous reader of the manuscript (the Milanese notary and scholar Giovanni Battista Bianchini, 1613–1699); however, the name Galvaneus gave to his own work, as indicated in the prologue, is *Cronica generalis sive universalis*. ⁵ A number of master's degree students (Roberta Ajello, Vittorio Fiore, Stefano Frati, Pamela Giunta, Giulia Greco, Giulia Negri, Myriam Nicoli, Rebecca Platini, Valentina Vavalà, Tommaso Zonca) have been involved in this programme up to this point, with the tasks of transcribing the text from the manuscript and of searching its sources. This phase of the work is now finished; Federica Favero (Ph.D.) is attending to the standardization of transcriptions and to checking the sources, in order to produce a critical edition of the *Cronica*

⁶ On the previous story of the manuscript see Céngarle Parisi, "Introduzione", 71–72, 131–38; Id., "Gli estratti in due codici milanesi della Cronaca Bianchiniana di Galvano Fiamma", in *Miscellanea Graecolatina* III (Milan, Rome, 2015), 267–86.

⁷ On this copyist see Mirella Ferrari, "La biblioteca del monastero di S. Ambrogio: episodi per una storia", in *Il monastero di S. Ambrogio nel medioevo* (Milan, 1998), 82–162, at 120; Céngarle Parisi, "Introduzione", 90–122; Chiesa, "Galvano Fiamma", 83–87.

⁸ Chiesa, "Ystorie Biblie": 190–191.

⁹ While copying another work of Galvaneus (the so-called *Cronicon Maius*), Ghioldi declares that his model presents some marginal glosses, and that he is going to warn the reader whenever he transcribes one ("a modo in antea cum fuerit introserta aliqua glosa in corpore, ponam in principio istud verbum: *glosa*, ut possit secerni testus a glosa": ms. Milan, Biblioteca Ambrosiana, MS A.275.inf, fol. 62v).

¹⁰ The inclusion of geographical sections within historical treatises is a common feature in medieval encyclopedic works; the connection is often provided by an event which opens a window on the dissemination of peoples in the world. In the case of Galvaneus's *Cronica universalis*, the digression is prompted by the diaspora of the Trojan princes after the defeat of their city, which allows the author to describe various lands and their alleged history.

¹¹ Marco Polo's travel report was already widespread at the time; on its circulation inside the Dominican Order see now the essays collected in *Ad consolationem legentium*. *Il Marco Polo dei Domenicani*, ed. by Maria Conte, Antonio Montefusco, Samuela Simion (Venice, 2020). For Odorico's *Relatio* (written 1330), later equally widespread, Galvaneus provides one of the earliest testimonies of.

¹² On the occurrences of this work in the *Cronica universalis* see Giulia Greco, "Viaggiatori mendicanti nelle opere di Galvano Fiamma", forthcoming.

¹³ This booklet refers to an embassy sent by the emperor of Ethiopia to the king of Spain and to pope Clement V, with surprising information about that country. See Paolo Chiesa, "Galvano Fiamma e Giovanni da Carignano. Una nuova fonte sull'ambasceria etiopica a Clemente V e sulla spedizione oceanica dei fratelli Vivaldi", *Itineraria* 17 (2018): 63–107; Alessandro Bausi and Paolo Chiesa, "The Hystoria Ethyopie in the Cronica Universalis of Galvaneus de la Flamma (d. c. 1345)", *Aethiopica* 22 (2019): 7–57.

¹⁴ Galvaneus devotes some chapters to this topic (3.273–277), quoting a lot of *auctoritates* (e.g. Macrobius, Adelard of Bath, Avicenna, Solinus, the *Imago mundi* etc.); in all likelihood, however,

he could be mainly indebted to Peter of Abano, who in chapter 67 of his *Conciliator differentiarum* discusses the problem with similar arguments and relying on similar *auctoritates* (Petro Abano Patavino, *Conciliator controversiarum, quae inter philosophos et medicos versantur*, ed. Venetiis apud Iuntas, 1548). On other medieval references, see Nathalie Bouloux, "L'espace habité", in *La terre. Connaissance, représentations, mesure au Moyen Age* (Turnhout, 2013), 259–441.

¹⁵ *Cronica universalis* 3.275 (fols. 258va–259va). We report literally the text as copied by Ghioldi, without standardizing non-classic (or frankly irregular) spelling and preserving some underlining of source, visible in the manuscript; however, we add an interpretative punctuation. I am indebted to Giulia Greco for the preliminary transcription of this passage. Our translation is basically literal, but it tries to explain some logical implied steps.

¹⁶ Galvaneus speaks of this fact again at 3:345 ("Ultra insulam Hybernie est una alia insula parva in qua nullus homo moritur, sed si fuerit senio affectus et portetur extra insulam, statim morietur"; fol. 274va); this notion is probably drawn from Bartholomaeus Anglicus (15.80).

¹⁷ *Liber domini Marchi Pauli de Veneciis de conditionibus et consuetudinibus orientalium regionum* I 62. I take the text from the electronic edition of Samuela Simion, available at http://virgo.unive.it/ecf-workflow/books/Ramusio/altre_schede/P_I_62.html (based on ms. Florence, Biblioteca Riccardiana, MS 983); I have verified and slightly corrected Simion's text on ms. Paris, BnF, lat. 6244-A, fol. 40r-v.

¹⁸ 15.174. There is no modern edition of this book; I recur to the *editio Argentinensis* of 1505 (*Liber de proprietatibus rerum Bartholomei Anglici Ordinis Minorum*, digitalised by the Münchener DigitalisierungsZentrum: https://daten.digitale-sammlungen.de/~db/0001/bsb00018287/images/

¹⁹ London, British Library, MS Cotton Tiberius B v, fol. 56v, 11th-12th century.

²⁰ The original, engraved on a silver plate in 1154 for Roger II, king of Sicily, is lost, but we access the map thanks to later copies dating back to the 14th century.

²¹ The first cartographic representation of Greenland is thought to be Claudius Clavus's map (1427), produced in Denmark; cfr. Axel Anton Bjørnbo, *Cartographia Groenlandica* (Copenhagen, 1912), 89–119.

²² Such variations in spelling are normal in the *Cronica universalis*'s manuscript.

²³ *Cronica universalis* 3.347–349 (fol. 274v).

²⁴ Ch. 22.8–9; C. Iulii Solini *Collectanea rerum memorabilium*, ed. Theodor Mommsen (Berlin, 1895²), 101–102. The knowledge provided by Solinus was passed on to medieval encyclopedists; see e.g. Isidore, *Etym.* 6.3–4, or Bartholomaeus Anglicus, *De proprietatibus rerum*, 15.155 and 161.
²⁵ In this passage Galvaneus mentions Iceland without other remarks, as he took for granted that his audience knew this land, which he never describes elsewhere. Such inconsistencies are not unusual

in the *Cronica universalis*, which is an unfinished work; for an alternative explanation, Iceland was not necessarily unknown to a medieval scholar, as we already noted, and Galvaneus might suppose that his audience understood the reference.

²⁶ Gesta Hammaburgensis ecclesiae pontificum 4.37: "Sunt autem plures aliae in Oceano insulae, quarum non minima est Gronland" (Magistri Adam Bremensis Gesta Hammaburgensis ecclesiae pontificum, ed. Bernhard Schmeidler, MGH SS RR Germ., Hanover, Leipzig, 1917, 274).

²⁷ *The King's Mirror (Speculum regale – Konungs Skuggsjá)*, transl. by Laurence Marcellus Larson (New York, 1917), 142–143. For a discussion and a bibliography about the medieval opinions on Greenland's *status*, see Kirsten A. Seaver, *The Frozen Echo. Greenland and the Exploration of North America, ca. A.D. 1000–1500* (Stanford, 1996), 34–35.

²⁸ Diplomatarium Norvegicum 17, p. 772, nr. 849; p. 774, nr. 850; p. 777, nr. 852.

²⁹ A summary in Rudolf Simek, *Altnordische Kosmographie. Studien und Quellen zu Weltbild und Weltbeschreibung in Norwegen und Island vom 12. bis 14. Jahrhundert*, Ergänzungsbände zum Reallexikon der germanischen Altertumskunde 4 (Berlin, New York, 1990), 207.

³⁰ The fall of the nasal -n- might have been caused by the deletion of the *titulus* on the third -a-. The final vowel -a- was probably added to match the standard Italian form (likewise, an -a- was added at the end of the word in *Grolandia*, for the Nordic *Gronland*).

³¹ Var. of ms. *H*: "they sailed for two days, first South and then shifting course to South-east".

³² Eiríks saga rauða 8; Icelandic text: Eiríks saga rauða. Eyrbyggja saga. Grænlendinga saga, eds. Einar Ól. Sveinsson and Matthías Þórðarson, Íslenzk fornrit 4 (Reykjavík, 1935). I take the translation from *The Vinland Sagas. The Norse Discovery of America*, eds. Magnus Magnusson and Hermann Pálsson (London, 1965), 94.

³³ Eiríks saga rauða 12; transl. from The Vinland Sagas, 102–103.

³⁴ The AM abbreviation means, as usual, Den Arnamagnæanske Samling, preserved in the University of Copenhagen.

³⁵ Rudolf Simek and Hermann Pálsson, *Lexikon der altnordischen Literatur* (Stuttgart, 1987), 151– 152. – Björn Jónsson of Skarðsá, who wrote in the 17th century an historical work about Greenland, speaks about "wood and other drift that comes [to Greenland] from the bays of Markland"; see Fridtjof Nansen, *In Northern Mists. Arctic Exploration in Early Times*, 2 vols. (New York, 1911), 1:299. It is not clear if Jónsson had access to an independent source, or if he himself deduced the information from the Saga's context (he borrowed the *Hauksbók* in 1625).

³⁶ Simek and Pálsson, *Lexikon der altnordischen Literatur*, 71.

³⁷ Grænlendinga Saga 3; Icelandic text: Eiríks saga rauða. Eyrbyggja saga. Grænlendinga saga, eds.
 Sveinsson, Þórðarson; transl. from The Vinland Sagas, 55.

³⁸ Simek, Pálsson, *Lexikon der altnordischen Literatur*, 85–86.

³⁹ *Islandske annaler indtil 1578*, ed. Gustav Storm (Oslo, 1888, repr. 1977), 213; the translation is by G. J. Marcus, *The Conquest of the North Atlantic* (New York, 1980), 77–78, who discusses the passage quoting Edward Reman, *The Norse Discovery and Explorations of America* (Berkeley, Los Angeles, 1949), 179. Seaver, *The Frozen Echo*, 28, considers this fact as evidence that in the 14th century the Greenlander Norse have resumed Markland voyages for obtaining lumber.

⁴⁰ Islandske annaler indtil 1578, 353, 403.

⁴¹ Simek, *Altnordische Kosmographie*,155–160; edition of the text 428–432.

⁴² Ibid., 264–273.

⁴³ Ibid., 435.

⁴⁴ Ibid., 444, 477. See also Nansen, In Northern Mists, 2:35.

⁴⁵ Simek, Altnordische Kosmographie, 325.

⁴⁶ The identification of these lands was intensely discussed in the past; see for example Väinö Tanner, *De gamla nordbornas Helluland, Markland och Vinland. Ett försök att lokalisera Vinlandsresornas huvudetapper i de islandska sagorna* (Åbo-Turku, 1940); for a survey of the different views, see R. A. Skelton, "The Vinland Map", in *The Vinland Map and the Tartar Relation* (New Haven, London, 1965), 107–239, at 218–220. More recently, see Rudolf Simek, *Erde und Kosmos im Mittelalter. Das Welt vor Kolumbus* (Munich, 1992), 65; Kirsten A. Seaver, *Maps, Myths, and Men* (Stanford CA, 2004), 36–38. As Skelton remarks, the attempts to elucidate the geography of the sagas are basically speculative; although archaeological evidence allows to identify some settlements, it is not possible to associate them to a definite name. See also Seaver, *The Frozen Echo*, 26–27.

⁴⁷ From the Icelandic *mörk*, 'forest'; see Richard Cleasby and Gudbrand Vigfússon, *Icelandic-English Dictionary* (Oxford, 1874), 414. Cleasby and Vigfússon also connect the name with the Icelandic verb *marka*, 'to sign', 'to mark' (a property line), meaning: 'forest-land with the notion of *marchland*, *border-land*': ibid., 413.

⁴⁸ "De qua etiam hoc memorabile ferunt, quod eadem glacies ita nigra et arida videatur propter antiquitatem, ut incensa ardeat... Nulla ibi fruges, minima lignorum copia" (4:36; ed. Schmeidler, 272).

⁴⁹ *Eiríks saga rauða* 8 (transl. from *The Vinland Sagas*: 93); *Grænlendinga Saga* 3: "Between glaciers and shore the land was like one great slab of rock" (ibid., 55). Actually, the name *Helluland* means 'land of stone slabs': see Cleasby and Vigfússon, *Icelandic-English Dictionary*, 255, s.v. *hella*.

⁵⁰ Bárðar saga 1; Icelandic text: Harðar saga. Bárðar saga, Þorskfirðinga saga, Flóamanna saga, eds. Þórhallur Vilmundarson and Bjarni Vilhjálmsson, Íslenzk fornrit 13 (Reykjavík, 1991), 99–172; transl. Bárðar saga, eds. Jón Skaptason and Phillip Pulsiano (New York, 1984).

⁵¹ Eiríks saga rauða 12 (The Vinland Sagas, 102–103).

⁵² 4:36; ed. Schmeidler, 272.

⁵³ Eiríks saga rauða 8 (The Vinland Sagas, 93).

⁵⁴ Perhaps because of the magnetic declination.

⁵⁵ 4:36; ed. Schmeidler, 272.

⁵⁶ The actual strength of episcopal power in Greenland is controversial; see Seaver, *The Frozen Echo*, 61–90.

⁵⁷ About "the Polar Star which remains behind you", Galvaneus seems to duplicate Marco Polo's information in order to connect it to a specific land (Greenland, the most northerly country he is aware of). It is hard to say if Galvaneus does that arbitrarily, or if he relies on seafarers' reports, although perhaps exaggerated.

⁵⁸ On this trade see G. J. Marcus, "The Greenland Trade-Route", *The Economic History Review* 7 (1954): 71–80, at 75; Seaver, *The Frozen Echo*, 82–85; see also note 73. Galvaneus likely interpolates from Marco Polo the detail that the *falcones albi* were sent to the emperor of Katai. The *falcones albi* were associated with northern lands also in the scientific literature of the Middle Ages; see Albertus Magnus, *De animalibus*, 13.11.65, ed. Hermann Stadler, 2 vols. (Münster i.W., 1916–1920), 2:1465: "falco albus qui venit a Septentrione et mari Oceano a regione Norwegiae et Suveciae et Estonia et finitimis silvis et montibus". In the *Konungs Skuggsjá* white falcons are mentioned as typical birds of Greenland (*The King's Mirror*, 144: "they are more numerous there than in any other country; but the natives do not know how to make any use of them").

⁵⁹ According to the *Konungs Skuggsjá*, Greenland sea is supposed to be "more tempestuous than all other seas" (ibid., 141), and it is reported to be ravaged by 'sea hedges', "as if all the waves and tempests of the ocean have been collected into three heaps, out of which three billows are formed... They are higher than lofty mountains and resemble steep, overhanging cliffs" (ibid., 137). Marcus, *The Conquest of the North Atlantic*, 94, remarks that the voyage to Greenland was considered (and really was) the most dangerous sea-crossing in medieval Europe, and quotes (p. 98) a letter written in 1341 by the bishop of Bergen, testifying that the way to Greenland lay *per mare non minus tempestuosissimum quam longissimum*.

⁶⁰ See above, notes 11–12.

⁶¹ *Cronica universalis* 3.288–289, 3.333 (fols. 262va, 263rb, 270vb–271ra). On this *Symon* see Greco, "Viaggiatori mendicanti".

⁶² *Cronica universalis* 3.288 (fol. 262r). The position of this table appears to be incongruous with the context: in all probability, the scheme, originally drawn on a single leaf in the unorganised material left by Galvaneus, was inserted by the copiyst Ghioldi in the wrong place.

⁶³ The circle of the earth is crossed by *paralelus artarticus*, *tropicus yemalis*, *circulus equinoctialis*, etc.; at the centre of the world is *Harim*, according to the tradition of Arabic geography.

⁶⁴ Cronica universalis 3.292 (fol. 264va). Galvaneus likely depends on John of Plano Carpini, *Historia Mongalorum* 5 ("these mountains *sagittas et arma ferrea attraxerunt*"), where there is no mention of the *clavi de navibus*.

⁶⁵ See above, note 13. John of Carignano was the priest of the Genoese church of San Marco in Molo, located in the harbour area, and was personally involved with seafaring activities; on his biography see Graziella Galliano, "Mauro, Giovanni (Giovanni da Carignano)", in *Dizionario biografico degli Italiani*, LXXII (Rome, 2009), 399–401

⁶⁶ Chiesa "Galvano Fiamma e Giovanni da Carignano", 79. In the *Cronica universalis*, 3:277 (fols. 259vb–260ra) Galvaneus, describing the Indian regions, says: "In mappa Ianuensi[s] ponitur India; superius ponitur sepulcrum beati Thome apostoli, de quo supradictum est quod est ultra equinoctialem; iterum superius ponitur terra ubi fit zinziber; superius ponuntur multe insule; superius ponitur insula Tabropane". The adverb *superius* makes sense only in the progressive description of a map oriented with South at the top; apparently, this map was rich of cartouches (and perhaps pictures). The information on India contained in Galvaneus's *Mappa Ianuensis* is much more detailed than the only surviving planisphere attributable to a Genoese milieu, or derived from it, in the first half of the 14th century (the map of Peter Vesconte).

⁶⁷ In the past, scholars assumed that Galvaneus spent some time in Genoa on the basis of insubstantial arguments, challenged by Tomea, "Per Galvano Fiamma", 87; nonetheless, Genoa was the seat of the Dominican *studium generale* of Northern Italy between 1304 and 1320, the span of time during which Galvaneus supposedly received his doctoral education (ibid., 84 note 25). Since the *terminus post quem* of John of Carignano's *Tractatus de mappa*, quoted by Galvaneus, is 1315, he could have stayed in Genoa a second time after that date. We know nothing of Galvaneus's life between 1315, when he is mentioned as a teacher in Milan, and 1330, when a document attests his presence in Bologna. In 1323 the Dominicans are supposed to have been forced to leave Milan, in obedience to the interdict issued by the papal legate Bertrand du Poujet; Galvaneus could have moved to Genoa in this circumstance, or he may have visited the city during one of the Dominican *capitula* held in Genoa later on (in 1324, 1329 and 1333).

⁶⁸ This map was destroyed during the Second World War and is now visible only in mediocre photographic reproductions; the most accessible is the one preserved in the Archivio di Stato of

Florence (Carte nautiche, geografiche e topografiche 2), available online (http://www.archiviodistato.firenze.it/).

⁶⁹ Ramon J. Pujades i Bataller, *Les cartes portolanes. La rapresentació medieval d'una mar solcada* (Barcelona, 2007), 248–261 (at 255 a discussion on the actual name of the cartographer, formerly reported as *Delorto* or *Dulcert*). In Dulceti's maps (dated Genoa, 1325, and Majorca, 1339), the *girifalci* and the *ursi albi* are associated with *Norwegia*.

⁷⁰ Tony Campbell, "Portolan Charts from the Late Thirteenth Century to 1500", in *The History of Cartography*, I: *Cartography in Prehistoric, Ancient, and Medieval Europe and the Mediterranean* (Chicago, 1987), 371–463, at 406, wonders about "the mechanism by which a steadily more plausible picture of the British Isles reached Mediterranean chartmakers". Some decades before, Paolo Revelli, *Cristoforo Colombo e la scuola cartografica genovese* (Genoa, 1937), 338, observed that John of Carignano was the author of "un primo tentativo di figurazione extratolemaica dell'Europa settentrionale".

⁷¹ In his classic work on Arctic exploration, Fridtjof Nansen remarked that many Nordic toponymies appear in the Carignano map "for the first time in any known authority", and supposed that the Genoese priest "may have had the name of ports, etc., from sailors" (*In Northern Mists*, 2:221).

⁷² Seaver, *The Frozen Echo*, 120–124, claims that sea voyages towards West Greenland were made from the British Islands during the XIIIth and XIVth centuries. The mentioned spelling of *Marckalada* (with the unusual grapheme *-ck-*) seems the clue for a not-far derivation from a Germanic source.

⁷³ We remark that in the *Konungs Skuggsjá* (see note 26) Greenland is considered to be the far edge of the lands, before the circle of the Ocean: "I do not believe there is any land in the home-circle beyond Greenland, only the great ocean that runs around the earth", the master says to the prince (transl. Larson, 148). Apparently, a geographic approach based on theoretical views, rather than the sailors' experience witnessed by Galvaneus. See Patrick Gauthier Dalché, "Comment penser l'Océan? Modes de connaissances des fines orbis terrarum du nord-ouest (de l'Antiquité au XIII^e siècle)", in *L'Europe et l'Océan au Moyen Age. Contribution à l'Histoire de la Navigation*, Actes des congrès de la Société des historiens médiévistes de l'enseignement supérieur public, 17^e congrès, Nantes, 1986 (Paris, 1988), 217–233, at 227–228.

⁷⁴ Transl. from Nansen, In Northern Mists, 2:208–209.

⁷⁵ On Genoese cartography see Revelli, *Cristoforo Colombo e la scuola cartografica genovese*; Gaetano Ferro, *La tradizione cartografica genovese e Cristoforo Colombo* (Rome, 1992). On the relationships between Genoese and Catalan (Majorcan) cartography: Anne-Dorothee von den Brincken, *Fines terrae. Die Enden der Erde und der vierte Kontinent auf mittelalterlichen Weltkarten* (Turnhout, 1992), 113–118; Pujades i Bataller, *Les cartes portolanes*, 248–263, 489– 493; Id. "Da Génova a Venecia y Mallorca: la emigración de cartógrafos ligures y la expansión mediterránea de las cartas de navegar (s. XIV)", in *Circolazione di uomini e scambi culturali tra città (secoli XII-XIV)* (Pistoia, Rome, 2013).

⁷⁶ Cfr. Ingrid Baumgärtner, "Weltbild und Empirie. Die Erweiterung des kartographischen
Weltbilds durch die Asienreisen des späten Mittelalters", *Journal of Medieval History* 23 (1997):
227–253, at 234; Ramon J. Pujades i Bataller, "Mappaemundi veneziane e catalane del basso
medioevo: due rami nati da uno stesso tronco", in *Venezia e la nuova oikoumene. Cartografia del Quattrocento – Venedig und die neue Oikoumene. Kartographie im 15. Jahrhundert* (Roma, 2016),
73–96, at 75–76 (with the example of Sijilmassa).

⁷⁷ This hypothesis was formulated by William H. Babcock, "Markland, otherwise Newfoundland", *Geographical Review* 4 (1917): 309–315, at 309; Id., *Legendary Islands of the Atlantic. A Study in Medieval Geography* (New York, 1922), 114.

⁷⁸ Theobald Fischer, *Sammlung mittelalterlicher Welt- und Seekarten italienischen Ursprungs und aus italienischen Bibliotheken und Archiven* (Venice, 1886), 13–15; John Roland Seymour Phillips, *The Medieval Expansion of Europe*, 2^a ed. (Oxford, 1998), 149–150. In the earliest documents that mention the island, its name is given in Italian: *Isola de lo legname* in the Medici Atlas of 1351 (although with more recent interpolations; Firenze, Biblioteca Laurenziana, Gadd. Reliq. 9); *Insula de legname* in the Catalan Atlas of 1375 (Paris, BnF, ms. esp. 30); *isla... que dizen Lecmane* in the *Libro del conoscimiento: El libro del conoscimiento de todos los reinos (The Book of Knowledge of All Kingdoms)*, ed. Nancy F. Marino (Tempe AZ, 1999), 50.

⁷⁹ The somewhat more mysterious island of *Brasil (Berzil, Brezil* etc.), which equally appears in the Atlantic maps of the 14th century, was also tentatively identified with *Markland*: see Joseph Fischer, *The Discoveries of the Norsemen in America. With Special Relation to Their Early Cartographical Representation* (London, 1903), 94–101. This identification was rejected by Skelton ("The Vinland Map", 182), as "too far-fetched for serious consideration".

⁸⁰ E.g. the indication *Illa verde* ("Green Island") found in a Catalan portolan (Milan, Biblioteca Ambrosiana, S.P.II.36, formerly S.P.II.5), and the presence of a peninsula named *Graenlant* east of Norway in the so-called "Columbus Map" (Paris, BnF, Cartes et plans, Rés. GE AA 562).

⁸¹ As we said (note 21), the Claudius Clavus map, including the first cartographic representation of Greenland, was made in Denmark in 1427. On other maps of the 15th century reporting Greenland see Revelli, *Cristoforo Colombo e la scuola cartografica genovese*, 334–341.

⁸² On the contrary, the news on Ethiopia reported by John of Carignano in his *Tractatus de mappa* and recovered by Galvaneus in the *Cronica universalis* (see note 13) probably contributed to the geographic shifting of Priest John's reign from Asia to Africa. In the western Middle Ages, John of Carignano is the first detailed source to speak of a Christian civilization in eastern Africa.
⁸³ For suggestions and corrections thanks to Fulvio Ferrari, Giulia Greco, Rossana Guglielmetti, Irene Malfatto, Matteo Salaroli, Prue Shaw.