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Marckalada: The First Mention of America in the Mediterranean Area (c. 1340)

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The Cronica universalis written by the Milanese friar Galvaneus Flamma (it. Galvano Fiamma, d. c. 1345) contains an astonishing reference to a terra que dicitur Marckalada, situated west from Greenland. This land is recognizable as the Markland mentioned by some Icelandic sources and identified by scholars as some part of the Atlantic coast of North America. Galvaneus's reference, probably derived by oral sources heard in Genoa, is the first mention of the American continent in the Mediterranean region, and gives evidence of the circulation (out of the Nordic area and 150 years before Columbus) of narratives about lands beyond Greenland. This article provides a transcription of the passage, explains its context in the Cronica universalis, compares it to the other (Nordic) references of Markland, and discusses the possible origin of Galvaneus's mention of Markland in light of Galvaneus's biography and working method.

KEYWORDS Markland; Galvaneus Flamma; Genoa; Greenland

La Cronica universalis écrite par le frère milanais Galvaneus Flamma (it. Galvano Fiamma, décédé circa 1345) contient une référence étonnante à une terra que dicitur Marckalada, située à l'ouest du Groenland. Cette terre se reconnaît comme le Markland mentionné par des sources islandaises, et identifié par des érudits comme une partie de la côte atlantique de l'Amérique du Nord. La mention de Galvaneus, probablement puisée dans des sources orales entendues à Gênes, est la première mention du continent américain dans la région méditerranéenne, et témoigne de la diffusion (hors de la région nordique et 150 ans avant Christophe Colomb) de récits au sujet des terres au-delà du Groenland. Cet article donne une transcription du passage, explique son contexte dans la Cronica universalis, le compare aux autres mentions (nordiques) du Markland, et discute l'origine possible de la mention du Markland par

Galvaneus à la lumière de la biographie et la méthode de travail de Galvaneus.

MOTS CLÉS le Markland, Galvaneus Flamma, Gênes, le Groenland

La Cronica universalis escrita por el fraile milanés Galvaneus Flamma (it. Galvano Fiamma, m. ca. 1345) contiene una asombrosa referencia a una terra que dicitur Marckalada, situada al oeste de Groenlandia. Esta tierra es reconocible como el Markland mencionado por algunas fuentes islandesas, e identificado por los estudiosos como una parte de la costa atlántica de América del Norte. La referencia de Galvano, probablemente derivada de fuentes orales escuchadas en Génova, es la primera mención del continente americano en la región mediterránea y atestigua la circulación (fuera del área nórdica y 150 años antes de Colón) de narrativas sobre tierras más allá de Groenlandia. Este artículo proporciona una transcripción del pasaje, explica su contexto en la Cronica universalis, lo compara con las otras referencias (nórdicas) de Markland y discute el posible origen de la mención de Markland por Galvano a la luz de la biografía de Galvano y de su método de trabajo.

PALABRAS CLAVE Markland, Galvano Flamma, Génova, Groenlandia

The Cronica universalis, written by the Milanese friar Galvaneus Flamma or de la Flamma (in Italian, Galvano Fiamma, 1283 – c. 1345), contains an astonishing reference to a land named Marckalada (terra que dicitur Marckalada), situated west of Greenland. This land is recognizable as the Markland mentioned by some Icelandic sources, and identified by most scholars as some part of Atlantic coast of North America. Galvaneus's reference is the first mention of the American continent in the Mediterranean region and gives evidence of early circulation, outside the Nordic area, of information about lands west of Greenland.

Galvaneus was a Dominican friar who lived in Milan and was connected to the Visconti family, which held at the time the lordship of the city. He wrote

On Galvaneus's biography and literary works, see Thomas Kaeppeli, Scriptores Ordinis Praedicatorum Medii Aevi, vol. 2 (Roma: ad S. Sabinae, 1975), pp. 6–10; Jörg Busch, Die mailänder Geschichtsschreibung zwischen Arnulf und Galvaneus Flamma. Die Beschäftigung mit der Vergangenheit im Umfeld einer oberitalienischen Kommune vom späten 11. bis zum frühen 14. Jahrhundert (München: Fink, 1997); Paolo Tomea, "Fiamma, Galvano," in Dizionario biografico degli Italiani, vol. 47 (Roma: Istituto della Enciclopedia Italiana, 1997), pp. 331–8; Tomea, "Per Galvano Fiamma," Italia medioevale e umanistica 39 (1996), pp. 77–120; Vera Fravventura, "Galvanus Flamma," in CALMA. Compendium Auctorum Latinorum Medii Aevi (500–1500), IV.1 (Firenze: Edizioni del Galluzzo, 2012), pp. 42–5; Riccardo Macchioro, "La Chronica Danielis nelle opere di Galvano Fiamma e nel Manipulus florum," in Miscellanea Graecolatina II, eds. Lisa Benedetti and Federico Gallo (Milano and Roma: Biblioteca Ambrosiana and Bulzoni, 2014), pp. 133–82; Paolo Chiesa, "Galvano Fiamma fra storiografia e letteratura," in Courts and Courtly Cultures in Early Modern Europe. Models and Languages, eds. Simone Albonico and Serena Romano (Roma: Viella, 2016), pp. 77–92; and Galvano Fiamma, Chronica pontificum Mediolanensium, ed. Federica Favero (Firenze: Edizioni del Galluzzo, 2018), pp. 3–16.

several literary works in Latin, mainly on historical subjects. His testimony is valuable for information on Milanese contemporary facts, about which he has first-hand knowledge. When Galvaneus deals with the past or with non-Milanese contexts, however, he gathers information from different sources, which he scrupulously declares, but which he assembles without critical judgment.² 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. The actual work is significantly shorter than previously announced: the narrative stops in the middle of the fourth book, ending with the biblical king Joas (2 *Kings*, ch. 11 & 12). There is no evidence that any further sections were ever written.³

In 2013, Sante Ambrogio Céngarle Parisi first identified Galvaneus's *Cronica universalis* and drew attention to it.⁴ The work, written in Latin, is still unpublished; an edition is planned, in the context of a scholarly and educational program promoted by the University of Milan.⁵ It is preserved in a single manuscript held by a private owner, who kindly gave permission to photograph it.⁶ The manuscript was written in Milan at the very end of the fourteenth century by a copyist named Pietro Ghioldi (in Latin, Petrus de Guioldis), who was also responsible for transcribing other historical works of Galvaneus.⁷ He apparently planned a complete edition

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, ed. Fulvio Delle Donne (Napoli: Federico II University Press, 2018), pp. 55–78; Federica Favero, "Ripensamenti e modifiche nelle cronache di Galvano Fiamma," in *Scrivere storia nel medioevo*. Regolamentazione delle forme e delle pratiche nei secoli XII–XV, eds. Fulvio Delle Donne, Paolo Garbini and Marino Zabbia (Roma: Viella, 2021), pp. 45–61. See also Sharon Dale, "Fourteenth-Century Lombard Chronicles," in Chronicling History. Chroniclers and Historians in Medieval and Renaissance Italy, eds. Sharon Dale, Alison Williams Lewin and Duane J. Osheim (University Park, PA: Pennsylvania State University Press, 2007), pp. 171–96, focused on Galvaneus's attitude toward the Visconti family and contemporary events.

³ For a description of Galvaneus's Cronica universalis see 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), pp. 179–216.

⁴ Sante Ambrogio Céngarle Parisi, "Introduzione," in *La Cronaca estravagante di Galvano Fiamma*, eds. Sante Ambrogio Céngarle Parisi and Massimiliano David (Milano: Casa del Manzoni, 2013), pp. 1–196: 43–5. 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 program up to this point, with the tasks of transcribing the text from the manuscript and providing a first survey on its sources. This phase of the work is now finished; Dr. Federica Favero is attending to standardizing the transcriptions and checking the sources, in order to produce a critical edition of the *Cronica*.

⁶ On the story of the manuscript, see Céngarle Parisi, "Introduzione," pp. 71–2, 131–8; Céngarle Parisi, "Gli estratti in due codici milanesi della Cronaca Bianchiniana di Galvano Fiamma," in *Miscellanea Graecolatina* III, eds. Stefano Costa and Federico Gallo (Milano and Roma: Biblioteca Ambrosiana and Bulzoni, 2015), pp. 267–86.

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* (Milano: Vita e pensiero, 1989), pp. 82–162: 120; Céngarle Parisi, "Introduzione," pp. 90–122; and Chiesa, "Galvano Fiamma," pp. 83–7.

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 incomplete and unfinished manuscripts by Galvaneus, which were sometimes difficult to read, enriched by marginal notes and slips. In this situation, Ghioldi made many mistakes in transcribing uncommon words (e.g. personal and geographical names), and left open several problems in the general structure of the work (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 antigraph was unambiguously readable. As a matter of fact, Ghioldi's attitude toward the text seems remarkably conservative and testifies in favor of his substantial fidelity to the models.

The mention of *Marckalada* occurs in the third book, which includes the third age of humankind (from Abraham to David), according to the traditional Augustinian partition. The narrative is structured on the grid of Biblical chronology, which Galvaneus complements with secular history and mythology. In addition to the chronological account, in the third book the writer inserts a long geographical excursus, mainly dealing with exotic areas: the Far East, Arctic lands, Oceanic islands, Africa. His sources are both scholarly treatises, such as Isidorus and Solinus, and recent accounts of travelers, such as Marco Polo and Odoric of Pordenone. Sometimes he quotes uncommon works, such as the *Epistole* of the Franciscan John (it. Giovanni) of Montecorvino, missionary to China, and the *Tractatus de mappa* by the Genoese priest and cartographer John (it. Giovanni) of Carignano, a treatise that partially survives only thanks to Galvaneus's extracts.

On the state of composition of the *Cronica universalis* see Chiesa, "Ystorie Biblie," pp. 190–1. The existence of glosses, probably marginal, in Galvaneus's manuscripts available to Ghioldi, is testified by the copyist himself. While copying another work of Galvaneus (the so-called *Cronicon maius*), he declares that his model presents some glosses, and that he is going to warn the reader whenever he transcribes one of them (a modo in antea cum fuerit introserta aliqua glosa in corpore, ponam in principio istud verbum: "glosa", ut possit secerni testus a glosa, "From here on, when some gloss is inserted in the text, I will write the label glosa at the beginning, so that the addition can be distinguished from the actual text:" Milan, Biblioteca Ambrosiana, MS A.275.inf, fol. 62 v). Evidence of slips in Ghioldi's model is the table of the terrestrial parallels and the winds drawn on fol. 262 of the *Cronica universalis*, placed in an incongruous position (see note 65 and context). For the incompleteness of the work, see also Paolo Chiesa, "Summa cronicarum. Un'opera incompiuta e perduta di Galvano Fiamma," *Filologia mediolatina* 24 (2017), pp. 305–21.

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.

Marco Polo's travel report was already widely disseminated at the time. On its circulation inside the Dominican Order, see the essays collected in *Ad consolationem legentium*. *Il Marco Polo dei Domenicani*, eds. Maria Conte, Antonio Montefusco and Samuela Simion (Venezia: Edizioni Ca' Foscari, 2020). For Odorico's *Relatio*, written in 1330, which was later widely circulated, Galvaneus provides one of the earliest testimonies.

¹¹ On the occurrences of this author in the *Cronica universalis*, see Giulia Greco, "Viaggiatori mendicanti nelle opere di Galvano Fiamma," *Franciscana* 22 (2020), pp. 225–56: 237–47.

On this work see note 62 and context.

interested in theoretical discussions about the habitability of non-temperate 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 well. In this context, he mentions *Marckalada*. Here is the text, with an English translation; I preserve some underlining of sources, visible in the manuscript. In italics are the most relevant passages, which we are going to discuss. 4

Et dicunt auctores 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 Marchus Paulus 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:

14 Cronica universalis 3.275 (fols. 258va-259va). I report literally the text as copied by Ghioldi, without standardizing non-classic (or, frankly, irregular) spelling, but adding 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 logically implied steps.

To the medieval discussion on this topic, see Nathalie Bouloux, "L'espace habité," in La terre. Connaissance, représentations, mesure au Moyen Age (Turnhout: Brepols, 2013), pp. 259-441. Galvaneus devotes some chapters to it (3.273-277), quoting many auctoritates (e.g. Macrobius, Adelard of Bath, Avicenna, Solinus, the Imago mundi, etc.). He seems however to be mainly indebted to the Italian philosopher and physician Peter of Abano († c. 1315), 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 (Venetiis: apud luntas, 1548). Galvaneus does not actually mention the name of Peter, but this can be explained with the fact that he was condemned by the Inquisition.

this fact is well known for Ireland.¹⁵ The reasons why this happens are unknown to us. Marco Polo 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, toward 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, toward 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.

The first argument concerns lands where people live, despite the supposed high temperature. On this point, Galvaneus derives his information from those whom he generically calls *auctores* that is, the geographical tradition passed to the Middle Ages from Late Antiquity, represented by Solinus and Isidorus, and more recently Bartholomaeus Anglicus, Albertus Magnus, Bentius (it. Benzo or Benzone) of Alessandria, ¹⁶ and others. For what concerns the northern lands, the major authority is Marco Polo, who is explicitly quoted, especially his description of the regions north of Karakorum, 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 well. ¹⁷

¹⁵ The belief that people of the Arctic region are long-living is traditional. The specific reference to Ireland seems to be drawn from Bartholomaeus Anglicus (*De proprietatibus rerum* 15.80; see following note), and is replied by Galvaneus 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* ("beyond the Ireland there is another smaller island, where no one ever dies. People at a very old age, however, if taken off the island, die immediately)."

Among the many medieval writers who dealt with such subjects, we mention those who were certainly known by Galvaneus, who quotes them explicitly in his works. Bartholomaeus Anglicus († c. 1250) is the author of the De proprietatibus rerum, the most widespread encyclopedia of the thirteenth century; see Heinz Meyer, Die Enzyklopädie des Bartholomäus Anglicus. Untersuchungen zur Überlieferungs- und Rezeptionsgeschichte von De proprietatibus rerum (München: Fink, 2000). Since this work lacks a modern edition, I refer to the editio Argentinensis of 1505: Liber de proprietatibus rerum Bartholomei Anglici Ordinis Minorum, https://daten.digitale-sammlungen.de/~db/0001/bsb00018287/images/. Albertus Magnus († 1280) is the famous Dominican philosopher and naturalist, widely read in the studia generalia and within the Order. Bentius of Alessandria († c. 1337) is a northern Italian writer who composed a huge encyclopedia (Chronicon), preserved in Milan, Biblioteca Ambrosiana, MS B 24 Inf. and published only in part, which was largely exploited by Galvaneus; see Marco Petoletti, Il Chronicon di Benzo d'Alessandria e i classici latini all'inizio del XIV secolo (Milano: Vita e pensiero, 2000).

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 Florence, Biblioteca Riccardiana, MS 983). I have verified and slightly corrected Simion's text on Paris, BnF, lat. 6244–A, fol. 40 r–v.

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.

When you leave Karakorum and the mount Altai, you go north for 40 days through the plain of Bangu. The people who live there are called Mekrit, and they are subject to Great Khan; their customs are like those of Tartars. They are a very wild people. They feed on the meat of the animals they hunt, especially of deer, of which they have an abundance; actually, they tame the deers and, after taming, ride them. They are lacking in both wheat and wine. In summer, they hunt birds and wild animals in abundance; in winter, they eat cooked animals and birds, and move from those lands because of the excessive cold.

And when you have traveled those 40 days, you come to the Ocean. Nearby rise the mountains in which the *herodii*, that is, the peregrine falcons have their nests; from here they are carried to the court of the Great Khan. In those mountains, you find no other birds, except the falcons and the so-called *bargelach*, on which the falcons feed. They are as big as partridges and have feet like those of parrots and a tail like a swallow's; they are capable of fast and great flights. On islands in that sea a large number of gyrfalcons live, which are carried to the Great Khan. The gyrfalcons imported to the Tartars from Christian lands are not carried to the Great Khan, who has plenty of them: they are carried to other Tartars, who live close to Armenians and Cumans.

In these regions, there are islands situated so far to the north, that the Arctic pole, that is, the Polar Star, is located south of them.

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. We can suppose that marinarii are also the source of the last passage, devoted to Marckalada, which is said to lie 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; "no sailor was ever able to know anything for sure about this land or about its features").

The lands called Yslandia and Grolandia do not pose problems of identification, since they are easily recognizable as Iceland and Greenland. Concerning the terra que dicitur Marckalada—not specifically defined insula, as Galvaneus does for Greenland, 18 no other land seems to be taken in account, except the Markland mentioned in a scant number of medieval sources, all emanating from Iceland¹⁹ and all indeed placing it to the south-west of Greenland. Most of the slight differences in spelling between Galvaneus's Marckalada and the Icelandic Markland do not represent a problem²⁰; 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 unfamiliar with, but slavishly transcribed his models 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 behavior which would be unusual for him. The only element of the spelling that strikes us as odd is the grapheme -ck-, extremely rare in Italian manuscripts of the fourteenth century and unique in the whole Cronica universalis. The use of -ck- implies an anomalous pronunciation (strengthened or stressed) of the guttural sound; this uncommon and isolated trait is unlikely to be a creation of Galvaneus or Ghioldi, and its singularity generates the suspicion that it depends on the persistence of a previous source.

All the medieval Nordic sources that mention *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 wind²¹ and sighted land ahead; this was a heavily wooded country abounding with animals. There was an island to the south-east, where they found bears, and so they named it Bjarn

On both occasions when Galvaneus deals with Greenland, he qualifies this land as insula, a notion that was not taken for granted at the time. Adam of Bremen speaks of Greenland as an island; in The King's Mirror the question of whether such land is mainland or an island is treated as controversial, and ultimately Greenland is considered mainland: Speculum regale – Konungs Skuggsjá, transl. Laurence Marcellus Larson (New York: The American Scandinavian Foundation, 1917), pp. 142–3. For a discussion and 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, CA: Stanford University Press, 1996), pp. 34–5.

¹⁹ 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 and New York: De Gruyter, 1990), p. 207.

²⁰ The dropping 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 a standard Italian onomastic form (likewise, an -a- was added at the end of the word in *Grolandia*).

²¹ Var. of ms. H: "they sailed for two days, first south and then shifting course to south-east."

Isle; they named the wooded mainland itself Markland."²² 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."²³ The text is preserved in the Hauksbók (AM 544 4^{to}),²⁴ written in 1306–1308,²⁵ and in the Skálholtsbók (AM 557 4^{to}), written about 1420.²⁶ The more recent manuscript is somewhat more conservative than the older one; the original text is thought to go back to the thirteenth century, although the narrative matter refers to the end of the tenth century.

- (2) In the *Grænlendinga Saga* (*Saga of Greenlanders*), 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*."²⁷ The oldest manuscript is the *Flateyjarbók* (Copenhagen, Det Kongelige Bibliotek, GKS 1005 fol.), completed in 1387²⁸; the original text is also thought to go back to the thirteenth century and the narrative matter to the end of the tenth century.
- (3) The Skálholtsannáll (Annals of Iceland; ms. AM 420 A 4^{to}, written in 1356 or later) for the year 1347 reports 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

Eiríks saga rauða 8. Icelandic text: Eiríks saga rauða. Eyrbyggja saga. Grænlendinga saga, eds. Einar Ól. Sveinsson and Matthías Þórðarson, Íslenzk fornrit 4 (Reykjavík: Hið Íslenzka Fornritafélag, 1957). I take the translation from The Vinland Sagas. The Norse Discovery of America, eds. Magnus Magnusson and Hermann Pálsson (Harmondsworth: Penguin, 1965), p. 94. From these editions are also taken the subsequent quotations of the Grænlendinga saga.

²³ Éiríks saga rauða 12; transl. from The Vinland Sagas, pp. 102-3.

²⁴ The AM abbreviation means, as usual, Den Arnamagnæanske Samling, housing the Arnamagnæan Manuscript Collection at the University of Copenhagen.

²⁵ Rudolf Simek and Hermann Pálsson, *Lexikon der altnordischen Literatur* (Stuttgart: Kroner, 1987), pp. 151– 2. Björn Jónsson of Skarðsá, who wrote in the seventeenth century an historical work about Greenland, speaks about "wood and other drift that comes [to Greenland] from the bays of Markland" (trans. by Fridtjof Nansen, *In Northern Mists. Arctic Exploration in Early Times*, London: Heinemann, 1911, vol. 1 p. 299). It is not clear if Jónsson had access to an independent source, or if he himself deduced the information from sagas's context (he is known to have used *Hauksbók* as a source in 1625).

²⁶ Simek and Pálsson, *Lexikon der altnordischen Literatur*, p. 71.

²⁷ Grænlendinga Saga 3. Icelandic text: see note 22; transl. from The Vinland Sagas, p. 55. The name Markland is supposed to be connected with Icelandic mörk, "forest;" see Richard Cleasby and Gudbrand Vigfússon, An Icelandic-English Dictionary (Oxford: Clarendon Press, 1874), p. 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 'march-land', 'border-land'" (p. 413).

²⁸ Simek and Pálsson, Lexikon der altnordischen Literatur, pp. 85-6.

- by gales to this land."²⁹ This information is recalled, with small changes, in the later *Gottskálksannáll* and *Flateyjarannáll*.³⁰
- (4) Markland is also mentioned in the description of the world (Heimslysing; conventionally named Kurze Weltbeschreibung by Rudolf Simek) reported in the manuscript AM 736 II 4^{to} (written about 1300) and in some later witnesses.^{3 I} The same description is also premised to the account of the journey (Leiðarvísir) by Nikulás Bergsson from Munkabverá (oldest manuscript: AM 194 8^{vo}, late fourteenth century).³² 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."33 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. Other Nordic descriptions of the world. derived from the Kurze Weltbeschreibung, also contain similar information.³⁴ 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 literature.³⁵

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*, as with *Vinland* and *Helluland*, as some part of the Atlantic coast of North America, where Icelanders and Greenlanders made explorations and marginal settlements, as is demonstrated by archeological evidence. *Markland* is usually assumed to be Labrador or Newfoundland, *Helluland* Baffin Island or Labrador, *Vinland* Newfoundland or some southern seaside.³⁶ This is obviously a matter for specialists, and we do not dare to enter the field.

The mention of Marckalada/Markland by Fiamma is a new testimony on this region, which is added to the few so far known. What makes the passage exceptional is its geographical provenance: not the Nordic area, as in the case

²⁹ Islandske annaler indtil 1578, ed. Gustav Storm (Christiania: Grøndahl, 1888), p. 213. The translation is by Geoffrey J. Marcus, The Conquest of the North Atlantic (Woodbridge: Boydell, 1980), pp. 77–8, who discusses the passage by quoting Edward Reman, Norse Discoveries and Explorations of America (Berkeley, CA: University of California Press, 1949), p. 179. Seaver, The Frozen Echo, p. 28, considers this fact as evidence that in the fourteenth century the Greenlander Norse resumed Markland voyages for obtaining lumber.

³⁰ Islandske annaler indtil 1578, pp. 353, 403.

³¹ Simek, Altnordische Kosmographie, pp. 155-60, 428-32.

³² Simek, Altnordische Kosmographie, pp. 264-73.

³³ Simek, Altnordische Kosmographie, p. 435.

³⁴ Simek, Altnordische Kosmographie, pp. 444, 477.

³⁵ Simek, Altnordische Kosmographie, p. 325.

³⁶ The identification of these lands was intensely discussed in the past; see e.g. Väinö Tanner, De gamla nordbornas Helluland, Markland och Vinland. Ett försök att lokalisera Vinlands-resornas huvudetapper i de islandska sagorna (Åbo, 1940). For a survey of the different views, see Raleigh A. Skelton, "The Vinland Map," in The Vinland Map and the Tartar Relation (New Haven, London: Yale University Press, 1965), pp. 107–239: 218–20. More recently, see: Rudolf Simek, Erde und Kosmos im Mittelalter. Das Welt vor Kolumbus (München: Beck, 1992), p. 65; Kirsten A. Seaver, Maps, Myths, and Men (Stanford CA: Stanford University Press, 2004), pp. 36–8. As Skelton remarks, the attempts to elucidate the geography of the sagas are basically speculative; although archeological evidence allows to identify some settlements, it is not possible to associate them to a definite name. See also Seaver, The Frozen Echo, pp. 26–7.

of the other mentions, but northern Italy. We are in the presence of the first reference to the American continent, albeit in an embryonic form, in the Mediterranean area.

The Marckalada described by Galvaneus is rich in trees (*ibi sunt arbores virides*), not unlike the wooded Markland of the Grænlendinga Saga, and animals live there, as in the Markland of the 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 Bremen.³⁷ 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 "huge stones" (lapides saxei grandes) recall the description of Helluland in the Eiríks saga rauða and in the 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."³⁸ 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.³⁹

Besides the surprising reference to *Markland*, the knowledge that Galvaneus shows of Greenland is also remarkable. To this land, he devotes another passage,⁴⁰ where the alternative spelling *Gorlandia*, *Gronlandia* occurs:

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.

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 cannot make any further sea voyage.

This passage is included in a list of islands located north or west of Ireland. The obvious sources for the context are Solinus's *Collectanea* and the medieval

³⁷ 4:36: Magistri Adam Bremensis Gesta Hammaburgensis ecclesiae pontificum, ed. Bernhard Schmeidler, Monumenta Germaniae Historica, Scriptores rerum Germanicarum in usum scholarum (Hannover and Leipzig: Hahn 1917), p. 272: Nulla ibi fruges, minima lignorum copia ("no crops grow there, very little wood").

³⁸ Eiriks saga rauða 8 (transl. The Vinland Sagas, p. 93); Grænlendinga Saga 3: "Between glaciers and shore the land was like one great slab of rock" (transl. The Vinland Sagas, p. 55). Actually, the name Helluland means "land of stone slabs"; see Cleasby and Vigfússon, An Icelandic-English Dictionary, p. 255, s.v. hella.

³⁹ Bárðar saga 1; Icelandic text: Harðar saga. Bárðar saga, Þorskfirðinga saga, Flóamanna saga, eds. Þórhallur Vilmundarson and Bjarni Vilhjálmsson, Íslenzk fornrit 13 (Reykjavík: Hid Islenzka Fornritafélag, 1991), pp. 99–172; transl. Bárðar saga, eds. Jón Skaptason and Phillip Pulsiano (New York: Garland, 1984).

 $^{^{4\}circ}$ Cronica universalis 3.347–349 (fol. 274v).

encyclopedists depending on Solinus (among Galvaneus's readings, Isidore and Bartholomaeus Anglicus)⁴¹; none of these authors, however, mentions Greenland or another island that can somehow correspond to it. Actually, knowledge of Greenland in south-central Europe seems to have been very limited in the fourteenth century. We have no evidence of a southern circulation of the literary sources that mentioned it, such as the chronicle of Adam of Bremen⁴² and the *Konungs Skuggsjá* (*King's Mirror*), an Old Norse *speculum* of the thirteenth century focused on the north-Atlantic area.⁴³ Although the papal curia was aware of the existence of Greenland since the eleventh century,⁴⁴ Galvaneus is the first to give some information about its features in the Italian area, and, more generally, in a Latin "scientific" and encyclopedic work, as his *Cronica universalis* claims to be.

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. As in the reference to Marckalada, in the description of Greenland, a contamination between different narrative elements appears to occur. The domus subterranee are similar to those where the skrælings escape after encountering Thorfinn Karlsefni in Markland, according to the Eiríks saga rauða, 45 or to the subterranee spelunce where the Icelanders dwell, according to Adam of Bremen⁴⁶; the Eiríks saga rauða also reports that big white bears (ursi albi magni) live in an island close to Markland.⁴⁷ The lack of wheat and wine and the foodstuffs of the dwellers (milk, meat and fish) find a partial parallel in Marco Polo's narrative (carnibus vescuntur animalium ... blado carent et vino: "they eat animal meat ... they lack corn and wine"), as well as the information about the Polar Star's startlingly visible southwards. The hint about the bishopric government of Greenland might echo what Adam of Bremen says of Iceland.⁴⁸ As a matter of fact, however, a Greenlander bishopric is attested since c. 1125: whatever its real authority, 49 such office was probably the most recognizable and comparable form of jurisdiction for a foreigner.

⁴¹ This second reference to Greenland is inserted between the chapters on *Thanatos* and *Thyle*, which follow each other in Solinus, *Collectanea* 22.8–9: C. Iulii Solini *Collectanea rerum memorabilium*, ed. Theodor Mommsen (2th ed., Berlin: Weidmann, 1895), pp. 101–2, and Isidore, *Etymologiae* 14.6.3–4: Isidori Hispalensis episcopi *Etymologiarum sive Originum libri XX*, ed. Wallace M. Lindsay (Oxford: Clarendon Press, 1911), *ad loc*. In these chapters some verbal correspondences occur with the wording of Bartholomaeus (*De proprietatibus rerum*, 15.155 and 161), which introduces *Thanatos* and *Thyle* in a different order; this fact suggest that Fiamma was using simultaneously a multiplicity of sources, as he does elsewhere.

⁴² 4.37 (ed. Schmeidler, p. 274): Sunt autem plures aliae in Oceano insulae, quarum non minima est Gronland, "there are other islands in the ocean, among which Greenland is not the smallest."

⁴³ See note 18.

⁴⁴ In 1053 Rome granted jurisdiction over *Gronlant*, along with the other *septentrionales nationes*, to the archbishops of Hamburg: *Diplomatarium Norvegicum*, vol. 17 (Kristiania: Malling, 1907), p. 772, no. 849.

⁴⁵ Eiríks saga rauða 12 (transl. The Vinland Sagas, pp. 102–3).

^{46 4:36 (}ed. Schmeidler, p. 272).

⁴⁷ Eiríks saga rauða 8 (transl. The Vinland Sagas, p. 93).

⁴⁸ 4:36 (ed. Schmeidler, p. 272): episcopum suum habent pro rege ("they regard their bishop as king").

⁴⁹ The actual strength of episcopal power in Greenland is controversial; see Seaver, *The Frozen Echo*, pp. 61–90.

From where does Galvaneus get his information about the north, so unusual for a scholar who, as far as is known, has never been out of northern Italy? A hypothesis can be formulated, taking into account the usual method of work of him, the sources that we know he had available, and the milieu in which he lived. 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, so that there are pages of his works where we find dozens of "bibliographic" references. Puzzlingly, for the items concerning Marckalada and Greenland, Galvaneus only refers to some generic auctores (for the nonspecific discussion on habitability) and to Marco Polo, from whom, as we have already seen, he draws only partial and perfunctory information. For these passages, 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 unlikely to have known this work, which, as we said, did not circulate in southern Europe. He does not even quote here the De proprietatibus rerum by Bartholomaeus Anglicus, which he exploits elsewhere—the only encyclopedic source available to him which shows a partial (limited to Iceland) knowledge of north-western lands. 50

Therefore, we are allowed to trust Galvaneus when he says that his knowledge comes from an oral report (*dicunt*): had he had some written source at his disposal, he would have most likely declared it (as he does customarily), in order to gain a stronger authority. 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. Moreover, Galvaneus identifies his source as seafarers: *marinarii qui conversantur in mari Datie et Norvegye*, and I do not see any reason to disbelieve him. Alternative subjects, as Nordic pilgrims or clerics passing through Milan on their way to Rome, cannot obviously be excluded, but they correspond poorly to Galvaneus's specificaton: he doesn't speak of *peregrini* or even *clerici*, nor quotes ecclesiastical documents related to Iceland or Greenland, although such qualifications or documents would have given greater force to the testimony. As a matter of fact, the details he reports are consistent with the interests and concerns of sailors: the position of the Polar Star, visible southwards; the singular mention of white bears bringing shipwrecked

⁵⁰ Bartholomaeus Anglicus devotes a chapter to Iceland (15.174), including a description of the land, its resources and its inhabitants. Galvaneus mentions Iceland twice in the passages we have quoted, but in neither case gives any description of it. The different treatment of Iceland compared to Greenland and other islands is assumed to be one of the many irregularities and incompletenesses of the Cronica universalis, which, as we have said, is not finished.

⁵¹ A conflation that could obviously predate Galvaneus, who is its final receiver and puts it in writing.

⁵² In any case, no ecclesiastical document known so far mentions Markland.

⁵³ 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).

sailors ashore⁵⁴; the trade in birds of prey, very lucrative at the time⁵⁵; the difficulty to reach the Greenlanders (*fere ad ipsos nullus est accessus*)⁵⁶; the storming waves which damage the ships⁵⁷ and make them impossible to use for a later voyage—thus reducing the chances of their crew to make it back home.

In another case, Galvaneus explicitly states that he uses an oral source, whose name he is able to give. Although, as we said, his description of the Far East is based on written reports, in particular on those of Marco Polo, Odoric of Pordenone and John of Montecorvino,⁵⁸ he also relates the information gathered from some *frater Symon predicator qui in partibus illis moram contraxit annis V* ("Friar Symon, a Dominican who spent five years in these regions"), otherwise unknown. Galvaneus states that *frater Symon*'s testimony is oral (*dicit, narrat, habui ex ore*)⁵⁹; nevertheless, he deems it worthy of mention even in an erudite context such as the *Cronica universalis*—a remarkably original aspect of his treatise.

Where might Galvaneus have heard, directly or indirectly, about sailors's experience? He lived in Milan, an inland city, not exactly a customary destination for seafarers. Our assumption is that he is reporting firsthand or secondhand information coming from Genoa, the closest seaport to Milan. As a matter of fact, in the *Cronica universalis* Galvaneus also shows familiarity with Genoa and Genoese sources in other cases:

(1) As we said, Galvaneus literally quotes (3:373-377, fols. 277rb-278vb) a large section of the *Tractatus de mappa*, a work by a *sacerdos Sancti Marchi de Ianua* ("priest of St Mark of Genoa"), easily identified with the

⁵⁴ Galvaneus's wording (ursi ... qui natant per mare et naufragos ad litus conducunt) does not make it clear whether the bears bring the castaways ashore to rescue or to eat them. In his description of Iceland (15.174), Bartholomaeus Anglicus describes white bears making holes in the ice, throwing themselves into the sea, a process that enabled them to bring ashore (ad litus deferentes) the fish they feed on.

⁵⁵ On this trade, see Geoffry J. Marcus, "The Greenland Trade-Route," The Economic History Review 7 (1954), pp. 71–80: 75; Seaver, The Frozen Echo, pp. 82–5; see also note 73 and context. 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 (Münster i.W.: Aschendorff, 1916–1920), vol. 2 p. 1465: falco albus qui venit a Septentrione et mari Oceano a regione Norwegiae et Suveciae et Estonia et finitimis silvis et montibus. "White hawk comes from the north and from the Ocean sea, from the regions of Norway, Sweden and Estonia and from the nearby forests and mountains." In the Konungs Skuggsjā white falcons are mentioned as typical birds of Greenland (The King's Mirror, p. 144: "they are more numerous there than in any other country; but the natives do not know how to make any use of them").

⁵⁶ Marcus, *The Conquest of the North Atlantic*, p. 94, underlines 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 "across a very stormy and wide sea" (*per mare non minus tempestuosissimum quam longissimum*).

⁵⁷ According to the *Konungs Skuggsjá*, the Greenland Sea is supposed to be "more tempestuous than all other seas" (*The King's Mirror*, p. 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" (p. 137). With "sea hedges" Larson translates the Old Norse *hafgerðingar* ("portentous waves mentioned by old sailors in the main between Iceland and America," according to Cleasby and Vigfússon, *An Icelandic-English Dictionary*, p. 228).

 $^{^{58}}$ See above, notes 10–11.

⁵⁹ Cronica universalis 3.288–289, 3.333 (fols. 262va, 263rb, 270vb–271ra). On this Symon, see Greco, "Viaggiatori mendicanti," pp. 247–54.

celebrated cartographer John of Carignano. Except for the extracts of Galvaneus, this work is lost. Given the title and the content which Galvaneus reports, the *Tractatus de mappa* is supposed to be a complementary writing, that better explained a map—perhaps the same one for which John of Carignano is famous today—by adding more information. The passage quoted by Galvaneus has an exceptional historical importance, giving an account of the first "Ethiopian" embassy in Western Europe during the Middle Ages. The *Tractatus de mappa* was a very rare work, and we have no evidence of its circulation outside Genoa.

- (2) At the end of the section on Ethiopia provided by John of Carignano (3:378, fols. 278vb–279ra), Galvaneus also adds a new testimony on the famous oceanic expedition of the Vivaldi brothers, who in 1291 sailed westward from Genoa and crossed the Strait of Gibraltar. According to Galvaneus's account, the Vivaldi expedition was said to have reached Ethiopia, from where the survivors gave up returning to their city. It is not clear whether Galvaneus also derives this information from John of Carignano; however, he explicitly attests its Genoese origin, namely from the Ethiopian ambassadors passing through this city. 63
- (3) In a passage of the *Cronica universalis* (3:277, fols. 259vb–26ora), where he is describing the Indian region, Galvaneus refers to some "Genoese map:" *In mappa lanuensi[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* ("In the Genoese map is drawn India; higher up is drawn the sepulchre of saint Thomas apostle, that we have already said is situated beyond the equator; higher up is drawn the land where ginger grows; higher up are drawn many islands; higher up is drawn the island of Tabropane"). Apparently, the *mappa lanuensis* was a planisphere including the Asiatic continent, rich in cartouches (and perhaps pictures), one of which indicated *India*, another *Thomas*, another *zinziber*, another *Tabropane*.⁶⁴ The iterate adverb *superius* makes sense only in the progressive

⁶⁰ John of Carignano was the priest of the Genoese church of San Marco in Molo, located in the harbor area, and was personally involved with seafaring activities; see Graziella Galliano, "Mauro, Giovanni (Giovanni da Carignano)," in *Dizionario biografico degli Italiani*, vol. 72 (Roma: Istituto della Enciclopedia Italiana, 2009), pp. 399–401.

⁶² 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), pp. 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), pp. 7–57.

⁶⁴ Chiesa "Galvano Fiamma e Giovanni da Carignano," p. 79. We have no other trace of this map.

⁶¹ John of Carignano's chart was destroyed during the Second World War and is now observable only in mediocre photographic reproductions. The most accessible is preserved in the Archivio di Stato of Florence (Carte nautiche, geografiche e topografiche 2), available online (http://www.archiviodistato.firenze.it/). The pre-destruction bibliography, written by scholars who could see the original map, is still useful: Theobald Fischer, Sammlung mittelalterlicher Welt- und Seekarten italienischen Ursprungs und aus italienischen Bibliotheken und Archiven (Venezia: Ongania, 1886), pp. 117–26; K. Kretschmer, Die italienischen Portolane des Mittelalters (Berlin: Ernst Siegfried Mittler und Sohn, 1909), pp. 109–10. More recently: T. 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 Medierranean, eds. J. B. Harley and David Woodward (Chicago: University of Chicago Press, 1987), pp. 371–463: 404–6; G. Ferro, La tradizione cartografica genovese e Cristoforo Colombo (Roma: Istituto Poligrafico e Zecca dello Stato, 1992), pp. 30–4.

⁶³ Embaxiatores supradicti imperatoris Ethyopie qui fuerunt in Ianua, qui viderunt ipsos Ianuenses in Ethyopia, ista narraverunt ("The aforesaid ambassadors of the emperor of Ethiopia, who saw those Genoese in Ethiopia, told these stories of them"): Chiesa "Galvano Fiamma e Giovanni da Carignano," p. 69; 100–7.

consulting of a map oriented with south at the top, where *Tabropane* is said to be drawn: Galvaneus describes the planisphere as if he had it in his own hands, following the succession of cartouches. Such a map was not a common object: the information on India contained in Galvaneus's *Mappa Ianuensis* seems to be much more detailed than the only surviving planisphere attributable to a Genoese milieu, or derived from it, in the first half of the fourteenth century (the *mappamundi* by Peter Vesconte, included in the *Liber secretorum* of Marino Sanuto).

(4) Inserted within the geographical section of the *Cronica universalis* (3:287, fol. 262 r) is a schematic representation of the terrestrial parallels, the cardinal points and the direction of the winds. The table, based on astronomic coordinates (*paralelus artarticus*, *tropicus yemalis*, *circulus equinoctialis*, etc.), follows the Arabic tradition in considering the city of *Harim* (or *Arin*) as the geographical center of the world, and belongs to a kind of map popular at the time. Its peculiarity, however, is that the names of the winds are provided both in Latin (*vulturnus*, *africus*, *favonius*, etc.) and in vernacular (*lebeg*, *suroch*, *mezdi*, *levanth*, *ponenth*, *grecho*, *magistro*), with a peculiar interweaving of scholarly tradition and current experience. Writing the vernacular names of winds was usual in the portolans, a kind of map widespread at the time in maritime cities, and particularly in Genoa, but largely unknown inland.

Therefore, there is evidence that Galvaneus draws some rare information from Genoa. Although we have no positive record of his stay in that city, it is very likely that he received his doctoral formation there, since the Dominican *studium generale* for northern Italy was located in Genoa between 1304 and 1320, a span of time within which Galvaneus supposedly studied.⁶⁸ He may have returned to the city later, or maintained relations with Genoese clergymen.⁶⁹ In every case, while he was writing the chronicle he had at his disposal texts and news coming from Genoa.

Given these parallels, our assumption is that information concerning the northern Atlantic came to Galvaneus from Genoa as well. The *marinarii qui conversantur in mari Datie et Norvegye* could be Genoese sailors themselves, or northern European sailors who transmitted news to their Genoese colleagues. Genoese were indeed the *marinarii* par excellence for the Milanese audience of the writer. An immediate derivation from Nordic seafarers seems less likely: we have no evidence of travels or contacts of Galvaneus in northern Europe, nor traces that he ever utilized written or oral sources of that direct provenance.

⁶⁵ The position of this table (on which I have a separate study planned) appears to be incongruous with the context, since in that point the general topic is sea chasms: in all probability, the scheme, originally drawn on a single leaf in the unorganized material left by Galvaneus, was inserted by the copyist Ghioldi in the wrong place.

Examples in David Woodward, "Medieval Mappaemundi," in The History of Cartography, I, pp. 286–370: 354–5.
On Genoese cartography, see Paolo Revelli, Cristoforo Colombo e la scuola cartografica genovese (Genova: Stabilimenti italiani arti grafiche, 1937); Campbell, "Portolan Charts," pp. 404–7; Ferro, La tradizione cartografica genovese; Ramon J. Pujades i Bataller, Les cartes portolanes. La rapresentació medieval d'una mar solcada (Barcelona, 2007), pp. 248–63, 489–93.

Tomea, "Per Galvano Fiamma," p. 84 n. 25.

⁶⁹ 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 against the city. 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 in 1324, 1329, and 1333. See Chiesa, "Galvano Fiamma e Giovanni da Carignano," p. 79.

It has long been noticed that the fourteenth-century portolan charts drawn in Genoa and in Catalonia offer a more advanced geographical representation of the north, 7° which could be achieved through direct contacts with those regions, as is the case for the aforementioned chart by John of Carignano, and for those by Angelino Dulceti, who is considered to be the link between Genoese cartographic practice and Majorca.⁷¹ These notions about the north-west are likely to have come to Genoa through 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 northern European merchants goods of that origin to be transported to the Mediterranean area. The marinarii mentioned by Galvaneus can fit into this dynamic: 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 harbors from Scottish, British, Danish, Norwegian sailors with whom they were trading.⁷² The geographical treatise by 'Alī ibn Mūsā ibn Sa'īd al-Maghribī (written around 1250-1270) 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 gift.⁷³

The "island of white falcons" is supposed to be Iceland, known to Arabic geographers and represented, e.g., in the al-Idrīsī world map.⁷⁴ 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, though evidence is lacking.

⁷⁰ Campbell, "Portolan Charts," p. 406, wonders about "the mechanism by which a steadily more plausible picture of the British Isles reached Mediterranean chartmakers." Such remarks are not recent. Some decades before, Revelli, Cristoforo Colombo, p. 338, observed that John of Carignano was the author of "a first attempt of extraptolemaic figuration of northern Europe." And 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, vol. 2, p. 21).

⁷¹ Pujades i Bataller, Les cartes portolanes pp. 248-61 (with a discussion on the actual name of the cartographer, formerly reported as Delorto or Dulcert: p. 255). In Dulceti's maps (dated Genoa, 1325, and Majorca, 1339), the girifalci and the ursi albi are associated with Norwegia.

⁷² Seaver, The Frozen Echo, pp. 120-4, claims that sea voyages toward west Greenland were made from the British Islands during the thirteenth and fourteenth centuries.

⁷³ Translation from Nansen, In Northern Mists, vol. 2, pp. 208-9.

⁷⁴ On the al-Idrīsī world map cfr. S. Maqbul Ahmad, "Cartography of al-Sharīf al-Idrīsī," in *The History of Cartography*, II: Cartography in the Traditional Islamic and South Asian Societies, eds. J. B. Harley and David Woodward (Chicago: University of Chicago Press, 1992), pp. 156–74. 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 fourteenth century.

The news reported by Galvaneus about *Marckalada/Markland*, just like those about the less evanescent Greenland, remain isolated, and there is no trace of an early reception either in Latin geographical treatises or in the Mediterranean cartography. If Genoa was the gateway for these news, as we claim in the present article, it remains to be explained why no mention of these lands seems to be found in the Genoese *mappae mundi* or portolans of the fourteenth century,⁷⁵ nor in those produced in Majorca and Catalonia, closely linked with the Genoese tradition⁷⁶—actually, these charts do not disdain to use notions gathered from oral sources, as travelers and merchants are.⁷⁷ This fact suggests a scenario of informality: the Genoese were interested in exploiting the "seafarers' rumors" about the lands of the extreme north-west for eventual commercial benefit, but these rumors were too vague to find consistency in cartographic or scholarly representations.⁷⁸

Despite its isolated position, and regardless of the assumptions that can be made about its provenance, Galvaneus's narrative bears witness to the circulation of geographic knowledge between the Nordic and the Mediterranean world in the

On the relationships between Genoese and Catalan (Majorcan) cartography, see Anne-Dorothee von den Brincken, Fines terrae. Die Enden der Erde und der vierte Kontinent auf mittelalterlichen Weltkarten (Turnhout: Brepols, 1992), pp. 113–8; Ramon J. Pujades i Bataller, "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 and Roma: Centro italiano di studi di storia e d'arte and Viella, 2013), pp. 79–167.

⁷⁷ Cfr. Ingrid Baumgärtner, "Weltbild und Empirie. Die Erweiterung des kartographischen Weltbilds durch die Asienreisen des späten Mittelalters," *Journal of Medieval History* 23 (1997), pp. 227–53: 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*, eds. Ingrid Baumgärtner and Piero Falchetta (Roma: Viella, 2016), pp. 73–96: 75–6.

On the contrary, the news about Ethiopia reported by John of Carignano in his *Tractatus de mappa* and used by Galvaneus in the *Cronica universalis* (see note 62 and context), probably contributed to the geographical shifting of Priest John's reign from Asia to Africa. In the western Middle Ages, the chart of John of Carignano seems to have been the first to indicate a Christian civilization in eastern Africa.

⁷⁵ The only, very dubious trace of Markland in Mediterranean cartography could be connected with Madeira, whose Portuguese name means "wooded land," "land of lumber." According to an old and very uncertain hypothesis, the sailors who traveled the Atlantic, vaguely aware of the presence of some wooded land located westwards (the elusive Markland), might have identified it with a recently discovered island. See William H. Babcock, "Markland, otherwise Newfoundland," Geographical Review 4 (1917), pp. 309–15: 309; Babcock, Legendary Islands of the Atlantic. A Study in Medieval Geography (New York: American Geographical Society, 1922), p. 114. Actually, Madeira entered the European geographical horizon in the second half of the fourteenth century, when it was just reached (probably) by Genoese navigators, since in the earliest documents that mention the island, its name is given in Italian: Isola de lo legname in the Medici Atlas (Firenze, Biblioteca Laurenziana, Gadd. Reliq. 9; dated 1351, although with more recent interpolations); Insula de legname in the Catalan Atlas of 1375 (Paris, BnF, ms. esp. 30; dated 1375); isla ... que dizen Lecmane in the Libro del conoscimiento (dated c. 1390): El libro del conoscimiento de todos los reinos (The Book of Knowledge of All Kingdoms), ed. Nancy F. Marino (Tempe, AZ: Arizona Center for Medieval and Renaissance Studies, 1999), p. 50. See Fischer, Sammlung mittelalterlicher Welt- und Seekarten, pp. 13-5; A Cortesão, The Nautical Chart of 1424 and the Early Discovery and Cartographical Representation of America. A Study on the History of Early Navigation and Cartography (Coimbra: University of Coimbra, 1954), p. 47; John Roland Seymour Phillips, The Medieval Expansion of Europe, 2nd ed. (Oxford: Clarendon Press, 1998), pp. 149-50. A connection between Madeira and Galvaneus's Marckalada seems to us doubtful: Galvaneus describes Marckalada not exactly 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. Also the island of Brasil (Berzil, Brezil etc.), which frequently appears in fourteenthcentury Atlantic maps, was tentatively identified with Markland: see Joseph Fischer, The Discoveries of the Norsemen in America. With Special Relation to Their Early Cartographical Representation (London: Stevens, 1903), pp. 94-101. This identification was rejected by Skelton ("The Vinland Map," p. 182), as "too far-fetched for serious consideration."

first half of the fourteenth century. Furthermore, it brings unprecedented evidence to the speculation that news about the American continent, derived from Nordic sources, circulated in Italy one and half centuries before Columbus.

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