The Cosmographiæe introductio of Martin Waldseemüller in facsimile

Martin Waldseemüller, Charles George Herbermann, Edward Burke
UNITED STATES CATHOLIC HISTORICAL SOCIETY
MONOGRAPH IV

THE COSMOGRAPHIAE INTRODUCTIO

OF

MARTIN WALDESEEMÜLLER
IN FACSIMILE

Followed by the Four Voyages of Amerigo Vespucci,
with their Translation into English;

to which are added

Waldseemüller's Two World Maps of 1507
With an Introduction

BY

Prof. JOSEPH FISCHER, S.J., and Prof. FRANZ VON WIESER

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PREFACE

Four hundred years ago, in the little town of St. Dié in Lorraine, the geographer, Martin Waldseemüller, published two world maps, one for use as a globe, the other a flat projection of the then known world. These two maps were the first that gave to the new world the name "America," which it bears to this day. At the same time, Waldseemüller published a pamphlet of forty pages whose purpose was to explain the world map and its various features, its bearings on geographical sides, and its record of new discoveries. Here the author set forth his reason for calling the newly found continent "America." The pamphlet bore the title, Cosmographiae Introductio or Introduction to Cosmography. By cosmography was meant geography, but Waldseemüller's little work has special reference to the world map published at the same time. As part of the Cosmographiae Introductio appeared a Latin version of the four voyages of Amerigo Vespucci. It was to serve as a justification for calling the new world "America."
Preface

The United States Catholic Historical Society, desirous of commemorating the four-hundredth anniversary of this notable event, publishes here-with a little memorial volume consisting:

First. Of an excellent facsimile reprint of the 1507 edition of the Cosmographia Introductio, which is one of the treasures of the University Library of Strasburg. This also includes the four voyages of Amerigo Vespucci, translated into Latin by Jean Basin of Sendacour. This copy belonged in 1510 to the celebrated humanist Beatus Rhenanus of Schlettstadt as appears from his name at the foot of the title-page.

Second. Of the translation of these two documents into English; the Cosmographiae Introductio being translated by Prof. Edward Burke and the Four Voyages of Amerigo Vespucci by Dr. Mario E. Cosenza;

Third. Of an excellent reduced facsimile of Waldseemüller's map, 14x26 inches (the original is 8 feet long and 4 ½ feet high), from the only remaining copy of the map found in 1901 by Professor Joseph Fischer, S.J., at the castle of Wolfegg in Württemberg;

Fourth. Of a facsimile copy of the Waldseemüller globe, now in the Hauslab-Liechtenstein collection at Vienna which was identified by Gallois;

Fifth. Of an introduction discussing the
Preface

various problems raised by Waldseemüller's publications by Prof. Joseph Fischer, S.J., the discoverer of the Waldseemüller map, and Prof. F. von Wieser of the University of Innsbruck, whose authoritative scholarship on all questions touching Martin Waldseemüller is recognized everywhere.

It is needless to say a word on the appropriateness of this publication at the present time. Besides its sentimental value, the publication will offer the reader a copy of the oldest map cut in wood, and probably of the oldest wall map ever published. The map will exhibit a picture of the world such as it was known four hundred years ago and, we may add, substantially such as it was known to Columbus himself, while the facsimile of the pamphlet will present us with a piece of early Strasburg black letter.

The Editor desires to express his warm recognition of the courtesies of Professors Fischer, S.J., and von Wieser in preparing their authoritative exposition of the history and significance of the *Cosmographiae Introductio* and the accompanying documents. He also returns his sincere thanks to Dr. Leigh Harrison Hunt, Professors William Fox, August Rupp, and Dr. J. Vincent Crowne of the College of the City of New York for valuable assistance given in the preparation of this work.
INTRODUCTION

By Prof. JOS. FISCHER, S.J.,
and Prof. FR. v. WIESER, Ph.D.

Four hundred years ago, on the 25th of April, 1507, there appeared in a little out-of-the-way Vosges village, St. Dié, in Lorraine, a little book destined to attain great historical importance—a book which later became of the utmost interest, particularly for America. The title of the book is as follows:

COSMOGRAPHIAE INTRODUCTIO,
CVM QVIBVSDAM GEOMETRIÆ AC
ASTRONOMIIÆ PRINCIPIIS AD EAM
REM NECESSARIIS.

In super quatuor Americi Vespucii Navi-
gationes.

Universalis Cosmographiae descriptio tam in
solido quam plano, eis etiam insertis, quæ
Ptolomæo ignota a nuperis reperta sunt.

As appears from the title, this book consists of two distinct parts: a geographical introduction (Cosmographiae Introductio), and an account of the four voyages of Amerigo Vespucci (Quatuor Americi Vespucii Navigationes). Moreover,
Introduction

we see that two maps belong to the book—a globe and a plane projection, on which, in addition to what was already known to Ptolemy, all newly discovered lands are laid down.

This work in its four parts was destined to satisfy, in great measure, the lively interest evinced by all classes of that day in geographical research, and particularly in the marvelous accounts of the discoveries recently made by the Spanish and Portuguese.

The publication met with instant success, and in a few months several editions of the text were issued. The map, as Waldseemüller himself informs us in a later publication, attained in a short time a circulation of not less than a thousand copies.

So it came about that a proposal made in the text and carried out in the two maps, viz., that the newly discovered continent be called AMERICA, was at once generally adopted and prevailed despite later opposition.

On the four-hundredth anniversary of the christening of America, it seems right and proper to render more generally accessible in facsimile the four parts of the publication to which the New World owes its name.

The parts of the original publication of 1507 at present are scattered; they are bibliographical curiosities and accessible only to the select few.
Introduction

Of the Cosmographiae Introductio, printed at St. Dié, in 1507, omitting mention of later reprints, we have two chief editions: one of the 25th of April, 1507 (vii Kal. Maii), and the other of the 29th of August, 1507 (iii Kal. Sept.). Of each of these editions there are two variants. In one Martinus Ilacomilus (the Graecized form of the name of Waldseemüller), and in the other the Gymnasium Vosagense are named as the editors. These variations appear in the dedication of the work to the Emperor Maximilian I:

1. Divo Maximiliano Cæsari Augusto Martinus Ilacomilus fælicitatem optat.

2. Divo Maximiliano Cæsari semper Augusto Gymnasium (!) Vosagense non rudibus indoctive artium humanitatis commentatoribus nunc exultans gloriæ cun (!) fælici desiderat principatu.

The Gymnasium Vosagense was composed of

1 The Strasburg edition appeared in 1509, the undated Lyons edition about 1518.

a small group of humanists which Canon Walter Ludd, secretary to Duke René II of Lorraine, had gathered about him, and which published his works in the printing-house erected there by Ludd himself. Besides Walter Ludd, this literary circle counted among its most prominent members Nicholas Ludd, the nephew of Walter, Joh. Basinus Sendacurius, Philesius Ringmann, and Martin Waldseemüller. The last two, it is true, entered the service of the two Ludds only as paid printers; but there can be no doubt that Waldseemüller and Ringmann were the most learned members of the Gymnasium Vosagense—those of the greatest literary attainments. The question now arises how to explain the discrepant statements of the two editions, the one of which ascribes to the Gymnasium Vosagense, the other to Waldseemüller alone, the editorship of the Cosmographiae Introductio.

1 The word Gymnasium should not here be interpreted as an educational institution. As to the various significations of the Gymnasium Vosagense see A. v. Humboldt, Kritische Untersuchungen, Berlin, 1852, ii, 363; D'Avezac, l.c., p. 11 sq.; C. Schmidt, Histoire littéraire de l'Alsace, Paris, 1879, ii, 111; L. Gallois, Le Gymnase Vosgien ( Bulletin de la Société de géographie de l'Est 1900, p. 88 sqq.).

2 "Officina mea literaria;" by these words Ludd designates this printing-house in his letter of dedication which prefaces Philesius Ringmann's Grammatica Figurata, also printed at St. Dié.

3 "Domini mei" the two Ludds are called by Waldseemüller in his letter to Amerbach, dated the 5th of April, 1507, published by C. Schmidt in his essay, Mathias Ringmann Philesius ( Mémoires de la Soc. d'Archéologie Lorraine, 3e série, t. iii, Nancy, 1873, p. 227), and reproduced by Harrisse in The Discovery of North America, Paris, London, 1892, p. 441.
Introduction

We know that Walter Ludd, the head of the Gymnasium Vosagense, had not only established, as previously mentioned, a printing office at St. Die and was an author, but had also furnished the money for the publications produced by other members of the Gymnasium, and that in the present case he had moreover procured the necessary scientific material.¹

As literary collaborators in the Cosmographiae Introductio are to be mentioned Philesius Rimgmann and Joh. Basinus Sendacuriius. The former contributed two poems—a shorter dedicated to Emperor Maximilian I, and a longer intended for the reader. The latter furnished the Latin version of the four voyages of Amerigo Vespucci, and as a preface a decastich and a distich ad lectorem.

There can be no doubt, however, that Martinus Waldseemüller (Ilacomilus) must be recognized as the real publisher of the entire work; for not only did the treatise on cosmography originate from his pen, but the two maps going with the work were designed by him. Both parties, therefore, in a way had the right to pose as authors of the work. In view, however, of the fact that Martin Waldseemüller undertook the principal task, and that the work represents in all its scientifically significant parts

¹ See D'Avezac, l.c., p. 65.
Introduction

his intellectual property, we consider it a point of honor to connect his name forever with the publication of the Cosmographiae Introductio.

For this reason, also, we have chosen the reading of the edition of the 25th of April, 1507, containing his name and which must typographically be regarded as the editio princeps, for reproduction in our facsimile edition.

Martin Waldseemüller1 was born between 1470–1475, probably at Radolfszell on Lake Constance. It is established by documentary evidence that his father had lived in Freiburg since 1480, at least, and that in 1490 he became a citizen of that city. On December 7th of the same year, Martin was matriculated in the University of Freiburg: “Martinus Waltzenmüller de Freiburgo, Constantiensis diœcesis, septima decembris.”

It is clear that he studied theology, for later, in a memorial to Duke René of Lorraine, he calls himself “clerc du diocèse de Costance.” He

1 He himself spells his German name, Waldseemüller, not Waltzenmüller; and its Græcized form adopted according to the humanists of the day, Ilacomilus, not Hylacomilus.

2 See P. Albert—Über die Herkunft Martin Waltzenmüller’s, genannt Hylacomilus. (Zeitschrift für die Geschichte des Oberrheins, N. F., xv, Karlsruhe, 1900, p. 510 sqq.)

3 It was Alex. v. Humboldt (l.c., ii, 362) who first drew attention to this entry in the University of Freiburg, thereby proving that the author Hylacomilus, known from his earlier works, was identical with this Waltzenmüller. See the lately published book: Die Matrikel der Universität Freiburg i. Br. 1460–1656, by Prof. Dr. H. Mayer, Freiburg, 1907.
Introduction

was therefore a clergyman in his native diocese of Constance. Subsequently, he became Canon at St. Dié, which position he occupied until his death, about 1522. Probably Waldseemüller, as far back as 1505, was engaged at Strasburg, jointly with Philesius Ringmann, in the study of the geography and the maps of Ptolemy. It is likely that before 1507 he also spent some time in Basel and collated in its libraries manuscripts for the proposed edition of Ptolemy. While there he became a friend of the printer Amerbach. In 1507 we find both Waldseemüller and Ringmann in the printing establishment of Walter Ludd at St. Dié. There Waldseemüller displayed his many-sided activity. He was employed as a printer—in his letter to the Duke René, previously mentioned, he styles himself "imprimeur"—and together with other members of the Gymnasium Vosagense he prepared a new edition of Ptolemy. At the same time, he worked on various portions of the important work now engaging our attention.

We shall now proceed to examine more closely the several portions of the Waldseemüller publications of 1507.

1 See Gallois, Bulletin, l.c., 221 sqq.
2 See Ringmann's letter from Strasburg, dated August 1, 1505, in his edition, relative to the third expedition of Amerigo Vespucci, De orā Antarctica, Argentina 1505.
3 See Waldseemüller's letter to Amerbach, cited above, dated April 5, 1507.
I

THE OUTLINES OF COSMOGRAPHY

Cosmographiae Introductio

In the nine chapters of his Cosmographiae Introductio, Waldseemüller treats the chief teachings of cosmography essentially according to traditional views.

In the introduction he discusses the principal theorems of geometry as far as they are needed for the understanding of geography; and he then proceeds minutely to define the globe, its circles, axes, zones, etc., its climata, its winds, its general divisions, the seas and islands, and the various distances on the surface of the globe.

Thrice in the text of the original (pp. 18, 25, and 30 of the facsimile edition), and on the inside of the double sheet whereon is the Figura universalis (facing p. 28 of facsimile edition), Waldseemüller makes mention of the new territories as described in Amerigo Vespucci's Quatuor Navigations, and which he calls the fourth continent—quarta orbis pars. Twice he proposes to christen this newly found part of the globe AMERICA in honor of its supposed discoverer. By America, of course, he meant the South American continent of to-day.
Outlines of Cosmography

The original words of the two passages above referred to run thus:

1. (p. 25) “Quarta orbis pars (quam quia Americus invenit, Amerigen quasi Americi terram sive Americam nuncupare licet).”

2. (p. 30) “Quarta pars per Americum Vesputium (ut in sequentibus audietur) inventa est, quam non video, cur quis jure vetet, ab Americo inventore sagacis ingenii viro Amerigen quasi Americi terram sive Americam dicendam, cum et Europa et Asia a mulieribus sua sortitas sint nomina.”

Waldseemüller himself carried out this proposal in his publication of 1507, when he inscribed on both maps belonging to the Cosmographiae Introductio the word America as the name of the newly discovered continent. Both maps are stated to belong to the work not only on the title-page of the book, but also in several passages of the text; in fact, Waldseemüller declares outright that the outlines of geography, called “Cosmographiae Introductio,” was but an explanatory text for his large map of the world,—“Generale nostrum, pro cuius intelligintia hæc scribimus.”

1 See p. 23 of this facsimile edition. The expression “generale” is also used elsewhere as synonymous with “Map of the World” and may be found in the letter of Waldseemüller to Amerbach, previously cited, and in the poem of dedication by Ringmann to the Emperor Maximilian I. (See l.c., p. 2.)
II

STORY OF THE FOUR VOYAGES OF AMERICO VESPUCCI

Quatuor Americi Vespucii navigationes

On the title-page of the second section, which contains the account of the four voyages of Amerigo Vespucci, the translator states that he had done it into Latin from the French, — "de vulgari Gallico in Latinum."

The dedication prefacing the actual account of the journey runs thus:

"Illustrissimo Renato Iherusalem et Sicilie regi, duci Lothoringie ac Barnensi, Americus Vespucius humilem reverentiam et debitam recommendationem."

According to this, Amerigo Vespucci must evidently have sent the story of his travels, written in French, to René, the titular King of Jerusalem and Duke of Lorraine.

Walter Ludd, too, declares in his work entitled, Speculi orbis declaratio, printed also in 1507 by Joh. Grieninger at Strasburg, that the account of the four voyages, written in French, had been sent from Portugal to Duke René. In the same

1 See p. 41 of our facsimile.

2 l.c., p. 42.
Four Voyages of Vespucci

work Ludd also informs us that it was he who urged its translation into Latin, and that he had entrusted Joh. Basinus with its execution: "Quarum etiam regionum descriptionem ex Portu-gallia ad te, Illustrissime rex Renate, gallico sermone missam Joannes Basinus Sendacurie insignis poeta, a me exoratus qua pollet elegantia latine interpretavit." ¹

Now it seems very strange that an Italian like Amerigo Vespucci should have sent an account of his voyages from Portugal to the Duke of Lorraine and in the French language. It may be conceded that Duke René may have received the account of Amerigo Vespucci from Portugal at the same time when he received the Portuguese sea-charts, a question we shall consider later. It is possible, also, that Vespucci wrote his report in French, for we know that in his youth he sojourned in France for some time as secretary of one of his relatives, who was the Florentine envoy at the court of Louis XI.² But it is inconceivable that Amerigo Vespucci should have addressed his report to the Duke of Lorraine. With Duke René Vespucci


² Cf. on this point G. Uzielli, Toscanelli 1893, p. 13 et seq., 23 et seq.; L. Gallois, l.c., Bulletin 1900, p. 72.
Four Voyages of Vespucci

had no personal relations. When, however, in the dedication to the *Four Voyages*, we read that Vespucci reminds the addressee of the friendship which had existed between “them” in the days “they” were students together at the house of his uncle, G. Antonio Vespucci, in Florence, we can entertain no doubt that Vespucci did not send his account to Duke René. Moreover, we know that Vespucci was an intimate friend and fellow-student of his countryman, Pietro Soderini, subsequently Gonfaloniere, of Florence. The passage quoted from the dedication as well as the address used, “Vuostra Magnificentia,” in the Italian edition of the *Quatuor Navigations* is quite applicable to Soderini. These passages as well as others referring to Soderini were inadvertently reproduced in the Latin translation, while all other phrases relating to the recipient of the letter were so adapted as to fit Duke René of Lorraine.

It seems more than probable that Vespucci wrote the account of his four voyages to Soderini in Italian. As a matter of fact, there

1 *ubi recordabitur, quod olim mutuam habuerimus inter nos amicitiam tempore iuventutis nostrae, cum grammaticæ rudimenta imbibentes sub probata vita et doctrina venerabilis et religiosi fratri de S. Marco Fratri Georgii Anthonii Vesputii avunculi mei pariter militaremus.* (See p. 43 of facsimile.)

exists a very ancient printed edition of the work which, while undated, must belong to the sixteenth century, judging from its typography.1 This original Italian edition was then translated into French and thence into Latin by Basinus Sendacurius at St. Dié. Waldseemüller in the Cosmographiae Introduitio (p. 18) explicitly states: "Quatuor Navigationes ex Italico sermone in Gallicum et ex Gallico in latinum versæ." It must be left undecided whether the French version was actually translated in Portugal as intimated by Walter Ludd, or whether it was made in Paris, a city with which Duke René, of course, was in constant communication. It is also doubtful whether the flattering substitution of the name of René as the intended recipient of the report was made while it was being translated into French or by Basinus Sendacurius.1

1 In regard to the different editions of the Vespucci letters and the literature dealing therewith, read besides the works cited above, D'Avezac, Meaume, Gallois, and particularly Harrisse Bibliotheca Americana Vetustissima, p. 55 et seq., and Additions p. xxii et seq.; F. A. de Varnhagen, Amerigo Vespucci, son caractère, ses écrits (mêmes les moins authentiques), sa vie et ses navigations, Lima 1865, p. 9 et seq. and 27 et seq., and the introductions of the 2 facsimile-editions of the "Lettera" by B. Quaritch, London 1885 and 1893.

9 The Latin text of Sendacurius was included by Simon Grynæus in his well-known collection of voyages, Novus orbis (Basel 1532, Paris 1532, Basel 1537 and 1555; a German edition appeared 1534. In more recent times M. F. Navarrete reprinted the entire Latin text in his Coleccion de los viajes y descubrimientos, III, Madrid 1829, p. 191 et seq.; F. A. de Varnhagen, Amerigo Vespucci p. 34 et seq.; G. Berchet Fonte Italiane per la storea della Scoperta del nuovo mondo, Rome 1893, et sq.; J. Boyd-Thacher, l.c., reproduces the report of the first voyage.
Four Voyages of Vespucci

The Quatuor Navigationes contained the most complete and substantial account of the trans-Atlantic discoveries which had appeared up to that time. Vespucci, during those four expeditions, became acquainted with extensive tracts of the South American Continent, and, according to his own statement, during the third voyage he reached as far south as the fifty-second degree of latitude and there sighted an inhospitable coast.

In a separate account, dealing with the third voyage and published in numerous printed editions, he conceived the vast territories of the southern hemisphere to be one united continent and called it the "New World"—"mundus novus."

It is therefore not surprising that Waldseemüller got the impression that Amerigo Vespucci was the discoverer of the new continent, and conceived the idea of calling the new continent AMERICA in his honor.
III

WALDSEEMÜLLER’S LARGE WORLD MAP OF 1507

Plate I

The map of the world which belongs to the Cosmographiae Introductio is called Universalis Cosmographiae descriptio in plano on the title-page of the book. Until quite recently this map was thought to be lost. From reduced copies made by the Swiss cosmographer, Henricus Glareanus, which have but lately come to light, it was possible, however, to obtain a fair

1 The two maps belonging to the Cosmographiae Introductio are frequently referred to in the text as “Totius orbis typus tam in solido quam plano,” also “Cosmographia tam solida quam plana,” or by other terms. See pp. 3, 4, 20, 37, etc., of our facsimile.

2 Of the two reductions of this map by Glareanus the one was found by Fr. v. Wieser in a copy of the Cosmographiae Introductio belonging to the University Library at Munich, the other by A. Elter in a copy of the Ulm-Ptolemy of 1482 belonging to the University Library at Bonn. In this latter work it is explicitly stated, “Secutus Geographum Deodatensem seu potius Vesagensem.” See Fr. v. Wieser, Magalhães-Strasse und Austral-Continent; Innsbruck, 1881, pp. 12, 26; A. Elter, De Henrico Glareano geoprapho et antiquissima forma “Americæ” commentatio; Festschrift der Bonner Universität, 1896, p. 7 et seq. See also E. Oberhummer, Zwei handschriftliche Karten des Glareanus in der Münchener-Universitätsbibliothek (Jahresbericht der Geogr.-Gesellschaft in München 1892, p. 67 sq.), Edw. Heawood, Glareanus, his Geography and Maps (in the Geographical Journal, London, 1905, p. 647 et seq.). C. F. Close, Glareanus (in the Royal Engineers Journal, 1905, p. 303).
Waldseemüller’s Large Map of 1507

notion of its appearance. A copy of an original print of the map, which had so long been vainly searched for, was ultimately discovered in 1900 by Prof. Jos. Fischer, S.J., in the library of Castle Wolfegg in Württemberg, belonging to the princely house of Waldburg.

A facsimile edition of this map, which is of the utmost importance to the history of cartography and of the age of transmarine discovery, was published in 1903, together with an exhaustive commentary by Jos. Fischer and Fr. v. Wieser in both German and English.1

Although Waldseemüller in the Cosmographiae Introductio remarks that his map is of larger dimensions than the globe; and though Glarceanus in the Munich edition of his copy still more sharply emphasizes the great size of Waldseemüller’s map,9 the newly found original print nevertheless caused a sensation on account of its impressive size, abundant contents, and the artistic merit of its adornment. The map consists of twelve sections engraved on wood,


9 Etenim ipse auctor id in maximo spatio compinxit ita, ut in codice hoc locum habere nequiret. See E. Oberhummer, l.c., p. 70.
Waldseemüller's Large Map of 1507

and is arranged in three zones, each of which contains four sections. Each section measures to its edge 45.5 \times 62 \text{ cm.} (18 \times 24\frac{1}{2} \text{ in.}). The map, covering thus a space of three square meters—about 36 square feet—represents the earth's form in a modified Ptolemaic coniform projection with curved meridians. On the lower edge, in capital letters, the title is thus inscribed: "\textit{UNIVERSALIS COSMOGRAPHIA SE-}
\textit{CUNDUM PTHOLOMÆI TRADITIO-
\textit{NEM ET AMERICI VESPUCII ALIOR-
\textit{UMQUE LUSTRATIONES.}"

The name of the author of this work is nowhere stated nor the date or place of its publication. By circumstantial evidence, however, it can be proved without the shadow of a doubt that at last we have Waldseemüller's long-lost large map of the earth, belonging to the \textit{Cosmo-
\textit{graphiæ Introductio}. Among these proofs are the following:

1. Its perfect agreement with the two copies of Glareanus, both in projection and in the outline of the several countries.

2. The conformity of the map to all the statements made regarding its details in the \textit{Cosmographiæ Introductio}, such as:
   a. The title, \textit{Universalis Cosmographia}.
   b. The designation of the several countries by means of the coats of arms of their re-
**Waldseemüller's Large Map of 1507**

The use of small crosses to indicate all places dangerous to navigation.

d. The name of "America," given to the newly discovered fourth continent.

e. The fact that the fourth continent is named and depicted as an island.

f. The agreement of several legends of the chart with those indicated in the *Cosmographiae Introductio*.

3. The explicit reference to the map made by Waldseemüller himself in his *Carta Marina* of 1516, which has the same number and size of sheets:

* Generalem igitur totius orbis typum,

1. *Hunc in modum terra iam quadripartita cognoscitur; et sunt tres prime partes continentes, quarta est insula.* See p. 30 of the facsimile.

2. Compare, for instance, the text at the lower left-hand corner of the map with p. 45 of our facsimile print.

Waldseemüller's Large Map of 1507

quam ante annos paucos absolutum non sine grandi labore ex Ptolomei traditione, auctore profecto prænimia vetustate vix nostris temporibus cognito, in lucem edideramus et in mille exemplaria exprimi curavimus. . . . Additis non paucis, quæ per marcum civem venetum . . . . et Cristoforum Columbium et Americum Vesputium capitaneos Portugalenses lustrata fuere.

The antithesis of the Ptolemaic tradition and the new discoveries of the Spaniards and Portuguese is pictorially expressed on the Waldseemüller map of 1507 by the busts of Ptolemy and Amerigo Vespucci.

The principal basis of Waldseemüller's large mappemonde were no doubt the maps of Claudius Ptolemy, which Waldseemüller knew from the Ptolemy edition published at Ulm in 1486. The Tabulae modernæ of the same edition gave him additional aid in the representation of Italy, Spain, France, and the territories of the North. In designing Germany, he made good use of Ezlaub's map for travelers, published a short time previously. Another source of information were the travels of Marco Polo, which he utilized for his designs of northern and eastern Asia as well as of the southern and

eastern islands of Asia. In making his drawing of these territories, Waldseemüller also made use of a map on which all countries described by Marco Polo were represented just as on a map of the world by Martellus Germanus, or on the Globe of Martin Behaim. As for the representation of the interior of Africa, there was at Waldseemüller's disposal an interesting Special Map of Abyssinia, whose specifications, however, he wrongly localized by making the Blue Nile appear to discharge its waters into the White Nile from the left, and by shifting the territory about Lake Tana (Sahaf lacus) to South Africa.

For his designs of the lands just discovered by the Spaniards and Portuguese, Waldseemüller, according to his own statement, followed certain sea-charts, cartas marinas sequuti sumus. We can prove positively that Waldseemüller made use of two Portuguese sea-charts in preparing his large map of the world. One of them must have been of the same type as the Hamy map, formerly known as the "King map."

1 See Fischer and v. Wieser, The Oldest Map with the Name America, p. 25 et seq.
2 See "Map of the World by Jodocus Hondius 1611," ed. by E. L. Stevenson, Ph.D., and Jos. Fischer, S.J., New York, 1907, p. 15. Prof. Fischer will soon publish this map of Abyssinia, of which he has found three variants.
3 See p. 37 of the facsimile.
4 The Hamy map was first published by E. T. Hamy in the Bulletin de géographie historique, 1886, and subsequently in his work.
Waldseemüller's Large Map of 1507

Waldseemüller's principal cartographic source of information, however, regarding the newly discovered territories was, as we have shown in our earlier work,1 the Canerio map.2 From Canerio Waldseemüller borrowed both the outlines and the legends for the representation of the coasts of the New World and South Africa.

The agreement of the two charts is so marked and extends to so many minor details of drawing in precisely the same places—as, for instance, the placing of the Padrãos, of the elephant in South Africa, of the armorial bearings, etc., in precisely the same positions—that it could not have been a map of the Canerio type which served Waldseemüller as the chief reference for his great work, but must have been Canerio's map itself, now preserved in the Naval Archives of Paris.

Waldseemüller's great map of the world produced a profound and lasting impression on cartography; it was a map of wholly new type and represented the earth with a grandeur never before attempted.

Ere many years had elapsed, many reduced copies of the work appeared; for instance, in 1510 the above-mentioned manuscript reproduc-

1 Fischer and v. Wieser, The Oldest Map, p. 27 et seq.
Waldseemüller's Large Map of 1507

tions of Henricus Glareanus; another in 1520
in the Vienna Solinus edition; and still another
in 1522 in the Basel edition of Pomponius Mela;
these were the work of Petrus Apianus.

Even the small hemispherical maps next to
the busts of Ptolemy and Amerigo Vespucci on
the upper edge of the large map were repeatedly
reproduced in the original size, as, for instance,
by Joh. Stobnicza in his Introductio in Ptolomei
Cosmographiam, printed in Krakow in 1512, and
in manuscript form by Glareanus and Sebastian
Münster.

Waldseemüller's map of 1507 was still more
widely spread by numerous adaptations, such as
those of Joh. Schöner, Peter Apian, Joachim
Vadian, Sebastian Münster, Gemma Frisius,
Kaspar Vopelius, and Abraham Ortelius.

In the little mappemonde, Universalis Cosmo-
graphia, attached to the numerous editions of
the Rudimenta Cosmographica by the Transylvanian
humanist, Joh. Honterus,' and which passed
thence into other works, Waldseemüller's World
Map continued to exist nearly unchanged for
almost a century.'

1 Appearing first in Krakow: Matthias Scharffenbergius excud.
1530.
2 For more detailed indications about the propagation and influence
of Waldseemüller's drawing of the world, see Fischer and v. Wieser,
l.c., p. 36 et seq.
IV

WALDSEEMÜLLER'S GLOBE OF 1507

Plate II

The reference made in the title of the Cosmographiae Introductio to a "Universalis cosmographiae description tam in solido quam plano" has been variously interpreted by scholars studying Waldseemüller's works. On the one hand the view was taken that the expression referred to two maps, one of which, in solido, represented a small chart in the form of a planisphere; while on the other hand it was contended that the words "tam in solido quam plano" signified but one complete map, on which small hemispherical supplementary maps had been inscribed in addition to the large chart. This latter contention was apparently justified by the rediscovery of Waldseemüller's map of 1507; for here are actually two small supplementary maps above the large one, representing, respectively, the Eastern and Western Hemisphere. On closer examination, however, it is clear that these two hemispherical charts

1 Breusing, Leitfaden durch das Wiegenalter der Kartographie, Frankfurt, 1883, p. 31.
2 Elter, l.c., pp. 21, 23.
Waldseemüller's Globe of 1507

can not be identified with the *Universalis Cosmographiae descriptio in solido*.

It is expressly stated in the *Cosmographiae Introductio* that the globe and the large map of the world differ in their indications of the degrees of latitude; for while on the globe the equator is marked in accordance with information derived from sea-charts and from accounts of the voyages of Vespucci, on the map it is drawn according to the system of Ptolemy. When, however, we compare the hemispherical charts with the main map, no difference can be perceived in their location of the equator relative to the countries of the world, a fact particularly noticeable on the western coast of Africa.

There exists, however, in the Hauslab-Liechtenstein Collection at Vienna, a printed representation of the terrestrial globe in strips, the only one hitherto found, which agrees with the statements published in the *Cosmographiae Introductio*. The coast of Guinea on this globe approaches about ten degrees closer to the equator than on the large map of the world or on the

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1. . . nos in depingendis tabulis typi generalis non omnimodo sequutos esse Ptholomæum præsertim circa novas terras, ubi in cartis marinis aliter animadvertimus æquatorem constitui quam Ptholomæus fecerit. . . . Et ita quidem temperavimus rem ut in plano circa novas terras et alia quæpiam Ptholomæum, in solido vero, quod plano additur, descriptionem Americi subsequentem sectati fuerimus. See p. 37 et seq. of facsimile.

2. Plate II gives these globe-strips on a scale of 2:3 of the original.
small charts representing the hemispheres. In Central America the Tropic of Cancer appears to the south of Hayti, while on the large map of the world its course is laid directly through the island of Isabella, or Cuba, as it is now called.

In the representation of America on the Hauslab-Liechtenstein globe the degrees of latitude correspond exactly with those found on contemporary Spanish and Portuguese maps such as those of Juan de la Cosa, of Bartholomeo Colombo, of the Hamy map, of the Cantino, and of the Canerio maps.

While the degrees of latitude of Africa do not exactly follow those of the Portuguese maps, Waldseemüller still being greatly influenced in these by Ptolemy, the Hauslab-Liechtenstein globe-strips correspond in every other particular with the details of the large map of 1507.

Attached to an edition of the Cosmographiae Introductio published in Lyons there is a small printed chart representing the globe, which corresponds with the Hauslab-Liechtenstein copy not only in the drawing and the disposition of the various territories, but also in the degrees of latitude above mentioned.

From all these facts we may safely infer that in the Hauslab-Liechtenstein globe-strips we possess the long-sought-for Waldseemüller globe
Waldseemüller's Globe of 1507

of 1507. It is the merit of F. A. de Varnhagen and L. Gallois to have been the first to establish this identity.

In 1509 there appeared in Strasburg a new edition of the *Cosmographiae Introductio* put forth by John Grieninger, an extremely active printer and publisher, on which Waldseemüller's (Ilacocmilus) name appears as that of the author. Grieninger, who was given to popularizing literature, at the same time published a German translation of the *Quatuor Navigationes*, of which two editions appeared in close succession, one about Mid-Lent, the other at Lætare. As a supplement to this German translation, giving an account of the four voyages of Amerigo Vespucci, a small booklet was published by Grieninger, entitled *Der welt kugel Beschrybung* (Description of the Globe).


3 Dies büchlin saget wie die zween durchlúchtigsten herren herr Fernandus K. zu Castilien und herr Emanuel K. zu Portugal haben das weyte mör ersuchet und funden vil Insulen und ein Nüwe welt von wilzen nachenden Leüten, vormals unbekant. Gedruckt zu Strassburg durch Johannen Grüninger. Im iar MCCCCIX uff mitfast. Wie du aber dê Kugel und beschreibung der gantzenn welt virston solle, würst du hernach funden und lesen. Harrisse, Add., p. 43; B. A. V., p. 118, the same title can be found, only it is not uff mitfast but uff Lætare.

4 *Der welt kugel Beschrybung: der Welt und dess gantzen Ert-
Waldseemüller’s Globe of 1507

A few months later, toward the end of August, 1509, another publication by Grieninger appeared, entitled *Globus mundi declaratio*, which is a Latin translation of *Der welt kugel Beschreibung*. In both these descriptions of the globe, reference is made not only to a small sphere belonging to the work but also to “*unser grosse Mappa*.” Considering all that has been said we cannot resist the conjecture that by this small globe and this large “Mappa” are meant Waldseemüller’s two charts and that they are new impressions from the original woodcuts of 1507.

As regards the large map of the world this may be unhesitatingly admitted, for there is nothing whatever known of a later edition; and
on account of the great size of the map and the quantity of wood-blocks needed it is also quite improbable that such an edition was published. There are, however, a great many indications that in 1509 Grieninger published a new edition of the small globe in German in order to render this important aid to the study of recent discoveries accessible to the general public. The representation of the globe on the title-page of both the German and Latin editions seems to point to this. This vignette represents a hemisphere on which the various countries are distributed in exactly the same manner as on the large globe of 1507, but with a German text. The small slice of the newly discovered Western Continent does not bear the inscription "America," but that of "nüw welt."

From this it must not, however, be inferred that the German globe did not also contain the word "America," as in the German description of the globe both expressions are used indifferently to designate the countries discovered by Vespucci.

To be sure, Waldseemüller did not use the word "America" in his later cartographical works, e.g., the large map of the world and the

1 Formerly authors regarded the globe-strips of the Hauslab-Liechtenstein Collection as belonging to the descriptions of the globe by Grieninger, as for example, D’Avezac, Bull. Soc. géogr., Paris, 1872, p. 16.
Waldseemüller’s Globe of 1507

Tabula terræ novæ of the Ptolemy edition published in Strasburg, 1513, the map of the world in the Strasburg edition of the Margarita philosophica of 1515, and the large Carta Marina of 1516.

Waldseemüller subsequently became convinced that Amerigo Vespucci should not be regarded as the true discoverer of the New World as he believed in 1507. His attempt, however, to withdraw the word “America,” a name he himself invented and used, proved a failure; for his works, published in 1507, had been rapidly spread far and wide in numberless prints, copies, and versions. As early as 1508 Waldseemüller wrote with just pride to his friend and co-worker, Philesius Ringmann, that his globe and world-map of 1507 were disseminated and known and highly commended throughout the whole world. In accordance with the proposal made by Waldseemüller in 1507, the name America was, for the time being, restricted to the southern part of the New World. After the lapse of three decades, however, another German cartographer applied the name America to the northern portion of the Western Hemisphere. On Gerhard Mer-

1 "Cosmographiam universalem tam solidam quam planam non sine gloria et laude per orbem disseminatam." These words are found in Waldseemüller’s treatise, “Architectura et Perspectiva Rudimenta,” published, 1508, in the Strasburg edition of the Margarita philosophica.
Waldseemüller's Globe of 1507

cator's map of the world, published in 1538 and drawn in the double heart-shaped projection of Stabius, the northern part of the New World, "América pars septentrionalis" is contrasted with its southern part, "América pars meridionalis."

Mercator, the great reformer of cartography, who knew the New World as a double continent, was the first to introduce into geographical literature the names North America and South America.

1 This map of Mercator, only one copy of which exists (in the library of the American Geographical Society), is reproduced, e.g., in the Facsimile-Atlas of Nordenskiöld, plate xliii.
COSMOGRAPHIAE INTRODUCTIONE:

CVM QVIBVS

DAM GEOMETRIA

AC

ASTRONOMIAE PRINCIPIS AD

EAM REM NECESSARIS:

Insuper quatuor Amencii Vespuici navigations.

Universalis Cosmographiae descriptio
tam in solido quam plano, etiam
insertis quae Ptolomeo
ignota a nuperis
reperta sunt.

DISTICHON:

Cum deus altra regat, et terrae climata Caesar
Nec tellus nec eis sydera maius habent.

Est Beati Rhinam Selenastani.

M D X.
MAXIMILIANO CAESARI AVGVSTO
PHILESIUS VOGESIGENA.

Cum tua sit vastum Maieftas færa per orbem:
Caesar in extremis Maximiliane plagis
Qua sol Eois rutilum caput extulit vndis/
Atque freta Herculeo nomine nota petit:
Quaque dies medius flagranti fydere seruet/
Congelat & Septem terga marina Trio:
Aciubeas regis magnorum maxime princeps
Mitia ad arbitrium iura subire tuum
Hinc tibi deuota generale hoc mente dicavit
Qui mira praefens arte paravit opus.

o Teled.
DIVO MAXIMILIANO CAESARI AV
GVSTO MARTINVS ILACO
MILVS FOELICITA
TEM OPTAT.

Si multas adiisse regiones /& populos vitimos
vidisse/nō solū voluptariū sed etiam in vita cōduci
bile est (quod in Platone / Apollonio Thyanāo
atē aūiīs multis philosophis/qui indagandārī re\ncausa remotissimās oras petierunt [clarum euadit]
quīs oro inuestīssīme Ĉāsar Maximilīane / regio
nū atē vrbium situs /& externorum homīnum
Quos videt condens radio under vndas
Phoebus extremino veniens ab ortu:
Quos premunt Septem gelidi Triones:
Quos Nothus sicco violentus estu
Torret ardentes recoquens harenas. Quīs inqua
illorū omniū ritus ae mores ex libris cognoscere iu
undū ac vītē esse inficiās ibit: Sane (vt dicā quod
mea fērī opinio) licet longissīme peregrinari laudā
bile est/īta de quis cui iple terrarū orbis vel ex sola
chartarū traditione cognitus est/nō absurde repeti
identīdē potest illud Odīsseae caput quod docētti Hōme-

mus poetarū Homerus de Vīsse scripsit.

Dic mihi musa virū captē post tempora Troiā
Quī mores homīnū multorum vidit & virbes.
Hinc factū est vt me libris Ptholomēi ad exēlar
Grēci quorundā ope p virili recognoscēte/ & qua
tuo Amerīci Vespuči navigationū luṣtrātiones addi-
cēte; totius orbis typū tā in solido čp plano velut

A ἦ
ANTELOQVIVM

preuiam quandä yлагоген p comuni studioforu
vilitate parauerim. Que tue lacratissime maiefperi
cu terrarü dnis exiftas dicare statui. Ratus me voti
topotë/ ab amuloru machinamentis tuo (tanç
Achills)clipeo tutissimu fore/ü tuç Maiefstatus acu
rissimo in eis rebus iudicio aliqua saltem ex parte
me latis finciffe intellelxero. Vale Cæsar inclytissi.
Ex oppido diui Deodati. Anno post natu Saluato
rem fupra sefquimillesimu septimo.

TRACTANDORVM ORDO.

CÜ Cosmographiae noticia fiue preuiia quadam
astronomie cognitione/et ipa etia astronomia fine
Geometriæ principis plene haberi neqat: dicemus
primo in hac succicta introductioe paucula de Geo-
metriæ inchoamentis ad sphære materialis intellige

2 De sidera/axis/ poli &c. (tiû fercientibus.
3 De coeli circulis.
2 Quandä ipsius sphære secundu graduu rōnes The
5 De quincç Zonis celestibus (oricã ponemus
erundēç &c graduû coeli ad terram applicatione
6 De Paralellis.
7 De climatibus orbis.
8 De ventis cü eorç et aliae rerû ffigura vniversali
9 Nono capite quedã de diuizione terre / de finibus
maris/de infulis/et locorç abinuice dintätia dicent
Addet etia quadrans Cosmographo vtilis.
Vltio loco quior Americi Vespucii subfüge. pe
fecições.Et Cosm, tâ solidâ ç planâ describemus.
DE PRINCIPIIS GEOMETRIAEE AD SPHERAE NOTICIAM NECESSARIIS CAPVT PRIMVM

VIA IN SEQUENTIBVS circuli/circumferentie/centri/diameter/et id genus aliorum crebra mentione fit: ideo primum nobis singillatim de talibus breuissime tractandum venit

Est igitur Circulus / figura plana vna quidem circumducta linea contenta: in cuius medio punctus est / a quo omnes rectae lineae ad circumdantem lineam eductae adinuicem sunt equales.

Figura plana est cuius mediin subdulat nec ab extremis egreditur.

Circumferentia est linea circuli continens ad quam omnes rectae lineae a centro circuli eieclae inter se sunt aequales / quae & ambitus & circuitus / curvaturaque ac circulus a latinis / grece autem peripheria dicitur.

Centru circuli est punctus ille a quo omnes rectae ad lineae circuli continentem eductae adinuicem sunt aequales.

Dimidius circulus est figura plana diametro circuli & mediate circumferentiae contenta.

Diameter circuli est quocumque linea recta per cen

A· iii

v
GEOMETRJAE

trī circuli transiens vtrīcī ad circuli peripheriam eiecta.

Linea recta est a puncto ad punctum extensio breuiissima.

Angulus est duarū lineae mutuos cotactus. Est eīm figurāe particula a lineā contactu in amplitudinem surgen s.

Angulus rectus est angulus ex lineā supra lineā cadente & vtrīcī altrīnāecus duos adnunciē equa les angulos faciente causatus: quē si rectē lineā continent rectīlineā: si curāe/curū u. spheralīscī dicēt: Obtusus est recto maior. Acutus recto minor.

Solidū est corpus longitudine/latitudine/altitudine/dimēnsum.

Altitudo/crassīcies/profunditas idem.

Integrum est res tota/aut rei pars que sexagenaria partitione non prouenit.

Minutum est sexagesima integri pars.

Secundum sexagesima pars minutī.

Tertiū sexagesima secundi/

CAPVT SECVDVM QVID SPHERA' axis/poli &e. stricīsimē perdocet.

Anteaeq; aliquis Cosmographiae noticia habere possit/necessum est vt spherae materialis cognitio

Postquod vnius orbis descriptione primo a Ptolomæo atēq; aliās traditam/\ deinde per alios amplificatā/nuper vero ab Americo Ves
INCHOAMENTA

Sputio latius illustratae facilius intellige. 

Sphera (ut ea Theodosius in libro de spheris definit) est solida & corporea figura vna quidem convexa superficialie cotenta/ in cuius medio punctus est a quo omnes rectae ad circuferentia educit & ad unius sunt equales. 

Et cum neotericis placet decem sint spherae coelestes fit materialis sphaera ad instar octauae (quod stellifera fit aplices dicitur) ex circulis artifici aliter adunucem iunctis per virgulam & axe medium centrum (quem terra est) tangere cospitum.

Axis sphaerae est linea per centrum sphaeræ træiens ex vtrac parte suas extremitates ad sphæ circuferentia applicatæ: circa quam sphaera sicut rota circa axem carri (qui stipes teres est) intortur & cum uertitur est qui ipsius circuli diametrum. De quibus Manili us ita loquitur.

Aera per gelidum tenuis deductur axis Sydereus medium circa quem voluitur orbis

Polii (qui & cardines & vertices dicuntur) sunt puncta coeli axem terminantia/ita fixa ut nuc mo meantur sed perpetuo codi loco maneat. Et quæ hic de axe ac polis dicuntur ad octauæ spheram refered sunt. Quoniam in præsentiarum materialis sphaeræ determinatione (ut diximus) octauæ sphæ ræ similitudinem habet: Suecepinus sunt itaque duo principales /vnum Septemtrionalis (qui & Arcticus & Borealis appellatur/alter Australis quiē

A ui
SPHERAE MATE.

ANTARCTICI vocant /de hijs Vergilius ait:

Virgili.
Hic vertex nobis semper sublimis /at illum
Sub pedibus stix attra vider manebiis profundi.

Nos en in Europa & Asia degetes poli Arcti
eu üpetuo videmus:q sic dicit ab Arcto vel Arctu
ro maiore Vrfa q & Calisco & Elice nomia & Se
ptetronialis a septo Steillis plaustri/q Triones voci
tanq & suit minoris Vrfae/quam etiam Cynosura

Baptif.
adpellant. Vnde Mantuanus Baptista.

Carne.
Tu nobis Elice nobis Cynosura /per altum
Te duce vela damus. C Item Borealis & Aquilo
nics ab eius mudi parte vento. Nautae stellam ma
ris vocare alueuerunt. Huic oppositus est antarcti
cus/vn & nomë fortit. Nam anti græca dictio lati
ne cótra significat. Is & Nothicus & Aufronothi
cus dicit: atq a nobis propter terræ circuli qui est
deuxus videri non potest/led ab antipodibus( qus
effe coperci ð)cernit. Vbi & obiter ànotadu /quod
Deuxu/rei sphericu tu morë & ventre significat.
Couvexúyo eius cótrariu eit/et cócavitate notat.
Sunt preterea duo alii poli ipsius zodiaci /duos in
celo circulos articiù. & antarctici descriptenses.

VERU quia zodiaci & arctici atq antarctici (qui in
celo fut circuli)mentioné soecimus:ideo capite les
quenti de circulis tractabimus.

DE CIRCVLIS COELI CAP. TERTIVM.

Duplices fut circuli q & segmia ab auctoribus
RUDIMENTA

dicunt in spera & cello nó reuera quidem existent
tes sed imaginabiles: maiores. & minores.

Maior circulus is est/qui in cóuexa superficie sph
ere descriptus ipsam in duo æqua diuidit/ horū sunt
sex. Aequator. & Zodiacus/Colurus æquinoctios
æ/Colurus solsticios/ Meridianus & Horiz
on.

Circulus minor in spera e qui in eadè sphærc su
perficie descriptus sphæram minime in duo æqua di
uidit: Tales sunt quatuor. Arcticus/ Cancri/ Capri
corni/ & Antæcticus. Ita summatim sunt decē de
quibus debita scrie et primo quidem de maioriibus
dicemus.

Aequator qui & primi mobilis cingulus/et æqui
noctialis dicit est circulus maior sphæram in duo
æqualia diuidens/ secundum quamlibet sui partem
ab vtrcī polo æque distans. Sic dictus quoniā lo:
le ipsum transeunte quod bis in anno in principio
arietis. & mēle Martio/ & principio libræ mense sepa
tembris contingit) toto terrarū orbe æquinoctium
& dies nocti æqualis est.

Aequinoctium Marci/ arietis/ vernale:

Aequinoctium Septembris/libræ/authumnale:

Zodiacus/ est circulus maior æquatorem in duo
bus punctis quē sunt principia arietis & libræ diri
mens/cuius vna medietatū ad septemtriones/altera
vero ad Austrum declinat. Ita dictus vel a zodion
quod animal significat/ quīn duodecim animalia in
SPHERAE MATE.

Le habet/vel a zoè quod est vita: quia omniū inferi orū vita secundū plantarū motus sub ipsa esse dig nofcit. Latini eū signiferi vocant/cp. xii. signa in se ferat. Atq obliquū circulū. Hinc & Maro insit Ob liquus qua se signorū verteret ordo.

In media zodiaci latitudinē circularis linea ipsum in duo equa partīēs et vtrō citrocp sex latitu. gra. reliqns intelligit: quā Eclipticā vocāt/eo quod nūq ēs solis aut lunæ deli quīū & eclipsis contingat/nisi eorum vterq̣̄ sub ea linea in eodem vel oppositis gradibus decurrat. In eodem si solare futurū sit deli quis. In oppositis vero si ipsius lunæ. Et sol semper sub ea linea medius incedit/nec vītro deuiat. Luna aut & cæteri planetarum nunc sub ca/nunc citra vel vītra expaciati vagantur.

Duo sunt in sphera colori/qui solsticina & equinocitia distinguunt. Ita a Colon grecē quod membrum significat/&t vris bobus (quos magnitudine Casfar* Elephantu Caesār commentario lib. iii. in Hercinia silua esse ait) dicti/quī ficit cauda bouis membrū/erecta semicirculū & non completū facit/ita nobis colorus semper imperfectus apparat. Vna eme mō dietatis videtur/cum alia sit occultata.

Colurus solsticiorū qui & declinationū dicitur est circulus maior per principia cancri & capricorni/p polos eclipticē parīf & polos mundi trāfiens. Aequinoctiorūm colorus itidem circulus maior
RUDIMENTA

est per principia arietis ac librarum & mundi polos transiens.

Meridianus est circulus maior per punctum verticis & polos mundi transiens. Tales in generalibus nostris tam solido & plano decem gradibus abint & vicin distinximus. Est aut punctum verticis (quod & zenith dicit) in celo punctus directe rei suppositus.

Horizon (quem finitorem quoque dicit) est sphærae circulus minor superius hemispherium (id est di midia sphærae) ab inferiori dividens. Est in que sub duos consistenti circitudo oculos videt obtutus desicere: qui et partem coeli visam a nobi visam dirimere cernit. Diversarum aut regionum variae est horizon: & omnium horizonum capitum vertex: polus dicit. Nam tale punctum omniquos ab infinito atque ipso horizonte equidistant. Et hac de circulis maioribus: nunc ad minores veniamus.

Circulus arcticus est circulus minor qui polus zodiaci ad motum primi mobilis circa polum mundi arcticum descriptum.

Antarcticus est circulus minor qui alter polus zodiaci circa polum mundi antarcticum causat atque de scribit. Nuncupamus aut polus zodiaci de quo etiam superiori capite diximus puncti undecim: ab ecliptica equidistant. Sunt enim poli zodiaci axis eclipticæ extræitates. Et igitur maxima solis declinatio de magnis pluribus tata est poli zodi, a polo mūdi distaria.
SPHERAE MATE.

Tropicus Cancri est/circulus minor quem sol in principio cancri existes ad motu primum mobilis describit/qui & solstitium estiuu dicitur.

Tropicus capricorni/est circulus minor quæ sol initiu capricorni tenens ad motu primum mobilis describit.hunc etiam circulu brumæ dicimus.

Ceterum quia declinationis mentione fœcimus ideo annotandu.

Declinatione esse quando sol de æquinoctiali ad Tropicus cancri scandit/vel ad capricorni tropicum nobis descendit.

Ascensione pro cœtrario accipimus/qni. a tropicis æquatori propinquat. Licet acyros & impro prie a quibus dà dicatur ascendere quando nobis pinquant/ & descendere eû a nobis diffedit. Hac eus de circulis/iam ad sphææ Theoricam et latioræ quandâ gradu quibus tales abinuicem dìstent spe culationem accedamus.

CAPVT QVARTVM

De quadam sphææ Theorica secundæ graduæ rationes.

Sphææ celestis quincâ ligatur circulis principiæ figubus uno maiore & quatuor minoribus/Arctis co.f,cancri/æquatore/ capricorni / et antarctico. E quibus æquor est maius aliæ quatuor minores. Hos Virgili ìplos vel potius quæ intersunt spacia authores Zo nas vocare alueuerunt. Hinc & Vergilius in Geor
RUDIMENTA

Quinque tenent coelum zonae: quatuor una coruscant
Semper sole rubens; & torrida semper ab igni est
Quam circiter extrema dextra laeuae trahuntur
Cerulea glacie concretæ atque himbribus atrae
Has inter mediam duas mortalibus aegris
Munere conceps diuini: & via secta per ambas
Obliquus qua se signoribus verteret ordine

De quaruqualitate insequentibus plura dicent.
Quia superius tetigimus quod polus Zodiaci circuli artico describit; ideo pro ulteriori speculatio ne sciendum hoc de superiori Zodiaci polo; qui in 60. gradu & 9. min. elevatiois situs est atque a polo artico. 28. gradibus ac 51. mi. distantie intellegi oportere:

Vbi & igitur non ignorantur Gradum trigesima signi partem esse. Et Signu duodecimam circuli.
At triginta duodecies multiplicata 360. reddut.
Quare liquidus cuadit quod gradus iterum tricentima et sexagesima circuli pars esse definxiri posset.

Circulum aut Antarticum polus Zodiaci inferior descript: qui in eodem gradu declinationis situs est et quod a polo antarcticus distant sicut superior ab arctico.

Tropicus cancri/eclipticae reflexio altera maxima solis qui est septemtrionis declinationis (que ab equinoctiali ad 33. grad & 51. min. sita est) designat.

Tropicus capricorni altera Eclipticae reflexio altera

xiii
SPHERAE MATE.

maxima solis versus Austrium declinatio (que ad totidem gradus sicut predicta sita est) descript.

Distantia inter tropicu cancri & circuli arcticu est, 22. gradui & 18. min. Totidem etiam gradui est distantia inter tropici capricorni & circulum antarcticum.

Aequatorem media coeli amplitudo a polis mui di equidistantis efficit.

Huc visq; de quinque zonis & earum abinvicem distantia. Cofequenter etiam strictim de reliquis que dam trademus.

Circuli zodiaci eius ipsius poli ostendit a quibus visq; ad tropicos (id est maximas solis declinaiones & solsticia). 22: grad. & 18. min. Est & zodiaci latitudo ab ecliptica solibus tropicis sex gradum & in uniusum: 12. grad.

Coluros declinationu & ascensionu signant solsticia & equinoxia/hijos sub polis mundi sepe per axem coeli ad angulos rectos spherales interfecat.

Similiter per eacute et Sed per Zodiaci aequinoctiorum coluri vadentes constituant angulos obliquis quos cui per solstitialiorum zod. rectos causent.

Circulum meridionalem (mobilem quidem) axis idem sub ipsis polis continet.

Horizontis circuli declarat zenith. Ipsum enim tanque polus eius superior existes ubi ab eo gue distat. Atq; diuidit idem circulus horizontis / hemi
RUDIMENTA

Sphæriu nostro ab altero per solis ortu & occasum: His vero qui sub æquinoctiali sunt per vtros mú di polos. Et distat semper zenith in omni horizonte ab ipsius circumferentia. 90. gradibus qui sunt quarta pars circuli. Est q3 peripheria horizontis quater distantiam inter zenith & horizonta superans.

Id demu animaduersione nō est indignum axem mūdi in materiali sphera diametraliter ab eiusdem polis per centrū mundi (que est terra) tranfare.

Axis vero zodiaci in sphera nō apparet sed intelligendus est. & hic axem mundi medium ad angulos impares sive obliquos in centro interfecat.

Hoc modo in ipsa mundi fabrica mirabilis series & rerū ordo precipuus est. videtur cujus imaginē veteres astrononi descriptentes factoris ipsius quam fieri potuit vestigia (qui omnia in numero pō dere & mensura fecit) sequi sunt. Nos quod ea de re tractantes spaci iniquitate sic exclusi vt ratio minutorū non vel vix possit obseruari & li obseruaretur etiam tedium cum errore gigneret/ a plēnis graduum annotationibus circulorum positionem sumemus. Nam non multum distat inter .51. mīn. & plenum gradum qui sexaginta minuta continent sicuti supradiximus atē in libro de sphera & aliubi ab harum rerum studiosis examussim declarat. Itaque in figura quam pro talium intelligens tia hoc loco subscriungermus ipsi bini tropici cancri.
SPHERAE MATE.

& capricorni aequinoctiali. 2. gradibus distabatur. Quantum & post liplus zodiaca/lie circuli arcticus & arcticus a polis mundi sunt distantibus super sexagessimi sexti elevanionis gradum siti.

Polus Arcticus
RUDIMENTA

De quinque Zonis coelestibus earundemique
& graduì coeli ad terrà applicatione.

CAPVT QUINTVM

Haec nunc breuissime de nonnullis Geometriæ prœ
cipitis de sphera/polis/quinque Zonis/arcis ipsis mū
di circuli/teruis tali quædā Theorica diximus: nūe
recto(ni fallor) ordine de applicatione horù circu-
lórù & graduì ad ipam terrà sustipienda determi-
natio venit. Ergo igíisciendù est in terrà quæ plā Oui-
dus per zonas predictas distingui. Vnde et Ouidius
us in Methamorphophi ait.

Vtq duæ dextra coelum totidemque sinistra
Parte secant zonas quintas est ardentior illis
Sic onus inclusum numero dixinxit eodem
Cura dei: totidemque plagè tellure premuntur
Quarù quae media est non est habitabilis estu
Nix tegit alta duas/totidem inter vtraque locavit
Temperiemque dedit mixta cu frigore flamma.

Et vt res apertior fiat /quatuor minores circuli
Arcticus/cancris/capricorni/ & antarcticus differ-
minant distinguunt quinque coeli zonas. Vt(verbì
causa) esto in sequenti figura. a. polus mundi arctis-
cus/b.c. circulus Boreus/d.e. circulus Cancri/s.g. cir-
culus capricorni/h.k. ăracticus/ l. yō polus Notthic-
cus. Erit prima zona. f. Borea arcticae totù inter. b
a.c. interceptū spaciũ/que perpetuo frigore rigens
inhabitata est. Secunda erit totum inter. b.c.e.t. d.
SP HERAE MATE.

intervenit spaciūi/temporata atque habitabilis. Tertia totū inter...d.e.f.g. medium spaciūi Æreore male egreps habitabilis. Sol em illic secundū linea.f.e.(q nobis eclipticā designat)assidua volubilitate gyros ducēs suo Æreore ea reddit torridā atque inhabitata Quarta est totū inter.f.g.et.h.k. spaciū temperata atque habitabilis/ì aquarū vastitas & altera coeli facies id impune finat. Quinta est totum inter.h.k.i. interdum spaciū frigore semper horrens atque in

Cum aut dicitus aliquă coeli zonā (habitatae nam vel inhabitā vel inhabitatae/hāc denominatio nem a simili zona terrae illi coelestit plagae subjecta intelligi volumus: & qh habitatā aut habitabilē dicimus bene & facile habitabilem. Cũ vero inhabitatam vel inhabitabilē egre difficile ḋ habitatīlem intelligimus. Sunt enim qui exultam torridam zonam nue habitant multi. Vt qui Chersonesum aus

Namvelincolūt/vt Taphrobanes/s/Aethiopes/et maxima pars terēs temper incognitae nuper ab Americo Vespucio reperte. Qua de re ipsius quatuor sub fuggentur navigationes ex Italico fermone in Gallicum/et ex Gallico in latinum verē.

Itae sciendū quod (vt & subsequēs indicat figura)prima zona q polo arctico proxima est. 23. grā
dus latitudinis & 51. miň. habet. Secūda quæ antarctica atque illi ipsi par est/totidem Tertia temporata. 22. & 18. miň.
RUDIMENTA

Quarta que par est totidem
Quinta e torrida & media gradus ±7, ±2 mi.
Sed horu quendam typum ponamus.

Polus Arcticus

Polus Antartc.
SPHERAE MATE.
CAPVT SEXTVM
DE PARALELLIS

Parallelli (qui & Almucanthurat dicunt) sunt circuli vel lineae quoquo versus atque ex omni parte æquidistantes & nunc quae poscent etiam in infinitum præhiti cœurrentes. Qualis est in sphera equator cum alijs quatuor circulis minoribus. Nō quia quantū primus a secundo tantum secundus a tertio distet nam hoc solum est vt ex precedebantibus li quet sed quilibet duo circuli simul inter se census dū quilibet qui pecque abinuice sint distantes. Nō enim est equator ex una parte altero tropicorum quae ex alia vicinior aut distantior cum omniquaque a tropicis sicut præfiximus 23° gradibus & 51° minutis distet. Simili modo de tropicis ad duos extre mos dicendum est: quorum vero ex omnibus sui partibus ab utroque 22° gradibus & 22° minutis di stant.

Licet 2o poscent paralelli ad libitum quilibet distantes describi nobis tamen pro faciliori supputatione conveniantissimum vsum est (quod et iphi Tholomæo placuit) vt tam in solidum & plana Cosmographia generalis descriptione ipsos tot gradibus abinuice secerneremus/quot sequens formula ostendit. Cui etiam figura subiungetur in qua paralellos per terrā utrique ad spharam coeli protractos.
<table>
<thead>
<tr>
<th>Paralelli ab equat.</th>
<th>gradus coeli</th>
<th>Horæ dies ru ma.</th>
<th>Quot milli fagra vnuus</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 Diatiles</td>
<td>63</td>
<td>10</td>
<td>28 ½</td>
</tr>
<tr>
<td>20</td>
<td>61</td>
<td>19</td>
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<td>19</td>
<td>58</td>
<td>18</td>
<td>32 ½</td>
</tr>
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<td>18</td>
<td>56</td>
<td>17</td>
<td>32 ½</td>
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<td>17</td>
<td>54</td>
<td>17</td>
<td>37 ½</td>
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<tr>
<td>16 Diarhip.7</td>
<td>51 ½</td>
<td>16 ½</td>
<td>20 ½</td>
</tr>
<tr>
<td>15 Diabor.6</td>
<td>28 ½</td>
<td>16</td>
<td>22 ½</td>
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<td>13</td>
<td>25</td>
<td>15 ½</td>
<td>26</td>
</tr>
<tr>
<td>13 Diarhō.5</td>
<td>20 1/2 1/2</td>
<td>15</td>
<td>27</td>
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<td>11</td>
<td>38 1/2 1/2</td>
<td>12 1/2 1/2</td>
<td>28 1/2</td>
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<td>10 Diarhod.2</td>
<td>36</td>
<td>18 1/2</td>
<td>50</td>
</tr>
<tr>
<td>9</td>
<td>33 1/2</td>
<td>12 1/2</td>
<td></td>
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<tr>
<td>8 Dialex.3</td>
<td>30 1/2</td>
<td>12</td>
<td>58</td>
</tr>
<tr>
<td>7</td>
<td>27 2/2 1/2</td>
<td>13 1/2</td>
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<tr>
<td>6 Diasienes</td>
<td>23 2/3</td>
<td>13 1/2</td>
<td>57</td>
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<tr>
<td>5</td>
<td>20 1/2</td>
<td>13 1/2</td>
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<tr>
<td>4 Diamero.1</td>
<td>16 3/4 1/2</td>
<td>13</td>
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<td>3</td>
<td>12 1/2</td>
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<td>2</td>
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<tr>
<td>1</td>
<td>2 1/8</td>
<td>12 1/8</td>
<td>59</td>
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<tr>
<td>Aeqtor a polis eqdistant</td>
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<td>2 Diameroes</td>
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<tr>
<td>Para. &amp; cl.</td>
<td>Gradus</td>
<td>Hore</td>
<td>Milliaria</td>
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<tr>
<td>6 Antidesfeces</td>
<td>23 1/3</td>
<td>13 1/2</td>
<td>52</td>
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<tr>
<td>7</td>
<td>27 1/6</td>
<td>13 1/2</td>
<td>52</td>
</tr>
</tbody>
</table>

Et ita deinceps ilius Antarticum polū. Quod & subsequens figura cōmonstrat.

Polus Antarcticus
RUDIMENTA

De climatibus caput. vii.

Licet clima propriè regio interpretetur/ hoc tamen locò spaciù terù inter duas equidistantes appellatur/in quo porrectissime died ab initio clima vis ad finem dimidiè horù variatio est. Et quottù aliquod clima ab equatore fuerit/tot semihoris longissima eius locù dies superat diem noctù equalem. Sunt cliforum Septemgeminù: quìs ad austrum nô sit septimum adhuc lustratum. Sed Boream versus Ptolomeus terram septem semihorù spacio hospitalem & habitabile inuenit: què septem clima ta ab insigne aut vrbe/a aut fluvio/a aut móte sua no mina sunt fortùta.

Primù dicitur DiaMeroes/a dia quod apud gre eos per significat/ & caú patrio iungit. Atòs a Meron que est Africè ciuitas in torrida zona citra equa tòre. 16. gradibùs sità/in quo paralello & ipse Nius esse inuenitur. Eius/ & subsequetium etìa initì medium & finem atòs maxìmè dieì in quòlibet ipòrum horas generale nostrù pro cuius intelligentia hég scribimus tibi liquido ostendent.

DiaSienes a Siene Aegipti vrbè/quod è quicç Thèbaidos principium.

DiaAlexandrias. Ab Alexandria insigne vrbè Africè Aegipti Metropoli: quam Alexander Magnus condidit: de quo dictù est a poeta: Vnus Pel leo iuveni non sufficit orbis.
SPHERAE MAT.

DiaRhodon /a Rhodo Asiae minoris insula: quae & suum nominis in ea sitam nostra tempestate clarā civitatem habet; fortiter Thurcarū essero bellicos impetus sustinentem atque profligantem genero sìllime.

DiaRhomes /a urbe Europæ notissima sita Italicas maxime clara & insigni olim gentii domitri cēe atque orbis capite nuc patris patri maxim i sede.

DiaBorischenes /a magno Scytharu fluvio qui est quartus ab Histro.

DiaRhipheon /a Ripheis montibus qui in Samatica Europæ insignes sunt perpetua niue candētes.

Ab his insignibus locis per quæ ferme climatum lineæ medio transeunt septem climata (quæ Ptholo meus posuit) sua fortiiuntur nomina.

Octauû Ptholomæus nō posuit cum illud terre (quod cunctis est) ipsi incognitū a nuperioribus lastratū sit. & dicitur Diatyles quod ipsius principiiū (qui est Paralellus ab equatore 21.) rectissime per Tylen sit pretius. Est aut Tyle Septemtrionalis in Virgiliis fula de qua Maro nostro Tibi serviet ultima Tyle:

Et hæc de climatibus ab equatore Septemtrionē gis. Pari mō dicendū est de eis quæ sīt utra equī noctialē ad Austrium quorū sex contraria nomina habentia sunt lastrata et dici possunt antidia Mer es / antidia Alexandrias / Antidia Rhodon Antidia.
RUDIMENTA

Rhomes antidiaBorischenes a greca pticaul anti
opposituvel contra denotat. Atq in sexto climate
Antarcticu versus & pars extrema Africae nuper
reperta & /Zamzibar /laua minor/ & Seula insule
& quarta orbis paras quam quia Americus inueuit
Amerigen /quali America terrae / sive Americana nun Ameri
cupare licet) sita sunt. De quibus Australibus dis ge
matibus hsec Pomponij Melis Geographi verba in
telligeda sunt /vbi ait. Zone habitabiles paria agit Popo
anni tempora/veru n5 pariter. Antiychones ante Melle
ram/nos alteram incolismus. Illius situs ob ardore in
tercedentis plage incognitus/huius dicundus est.
Vbi animaduertendum est quod climatii quo do
alios ob alud pleorog foetus /ducat/cu diuersi sunt
naturae & alia atq alia syderi virtute moderentur.
Vnde Virgilius.

Nec vero terrae ferre omnes omnia possunt
Hic segetes/illic veniunt foelicius yue
Arborei foetus alibi/atq iniussa virectunt
Gramia. Ninite vides croceos vt Thmolus odore
India mittit eburs; mittit sua thura Sabei
At Calypes nudi ferru: viro/ach pontus
Costerea. Eiadu palmas Ep iros equaru &c.

OCTAVUM CAPVT DE VENTIS.

Quoniam in supenonbus ventoru bi aliquando inci
derent memores suimns (cu soli Boreu / soli
Nothieu/atq id genus alia diximus) & iploru ces
SPHERAE MAT.

Ignitio nonihil mometi imo magna vilitate ad Cofmographia habere dignoscit:ideo hoc subsequenti capite quedam de ventis (qui & spiritus & flatus discunet) trademus. Est igitur ventus (ut a Philosophis definitur) exhalatio calida & sicca laterali ter circa terram mota &e.


<table>
<thead>
<tr>
<th>Oriens.</th>
<th>Occidens.</th>
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<tr>
<td>Collat.</td>
<td>Trop. Canc.</td>
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<table>
<thead>
<tr>
<th>Vento rutilis forma.</th>
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<tr>
<td>Collat.</td>
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<td>Medn</td>
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<td>Collat.</td>
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</table>

xxvi
RUDIMENTA

Poetis mius principales (et collatales dicunt) principalioribus ex licentia (ut suus libi mos est) Ouidius

Burnus ad Aurorâ Nabathacq regna recessit Persidaq et radis iuga subdita matutinis.

Vesper & Occiduo qua littora sole tepe reform Proxima sunt Zephiro: Scythiam/ septecq; Triones

Horrifer iuasit Boreas/contraria tellus

Nubibus assiduis/pluuiocq; madecst ab Austro

Est auté Subsolani aura saluberrima /que a sole purior & subtilior alius efficientur.

Zephirus Caloris et humoris temperiem habes montiu pruinias resoluit. Virgilii Liquitur et putris Zephiro se gleba resoluit.

Austri flatus crebro tempestatâ/pellarû/ atque himbriu plagus e. Quare & Nazo insit. Madidis

Nothus evolat alis.

Aquilo suo rigore aquas ligat/atque constringit Vir. Et glacialis hyem Aquiloibus asperat vndas

His de ventis Gallinarii nostri multe doctrinâ virî sequetes quatuor edere vericulos memini.

Eurus et Eoo flat. Subsolanus ab ortu.

Flatibus occasum Zephirusq; Fauonius implent.

Auster in extremis Lybiae et Nothus estuat oris. Sudificus Boreas Aquiloq; minatur ab axe.

Et licet veti septentrionales sint natura frigidi/nihilo tamen minus quando torridam zonam per

XXVII
COSMOGRAPHIAE

translunt/mitigantur: sicut & de Austro torridam
Zonam anteacq ad nos veniat translunt/cäperta est. Quod sequentibus versibus insinuatur.
Quocq loco prodit gelidus furit Austern & arctis
Cogit aquas vincis/ at dum per torrida flatu
Sydera transierit/nostras captandas in oras
Cämeat: & Boreq seuissima tela recorquet
At contra Boreas nobis grauis/orbe sub imo
Fit ratione pari moderatis leuior alis.
Caetera mox varios qua cursus flamina mittunt
Immutant propriq naturam sedis eundo.
Hucufq de ventis dicti sufficiat.Ponamus núc
hæc omniq figurāniviuerale: in qua sint poli/axes/
circuli çü maiores tum etiam minores/oriens/occip
dens/quinqu zonæ/gradus lōgitudinis/latitudinis
& tam ipsius terræ cœli/parallelli/ climata/venti Ætc.

CAPVT.IX.DE QVIBVS DAM COSMOGRA PHIAE RVDIMENTIS.

Omne terræ ambitu ad cœli spaciun puncti obti
nere rationem Astronomicis demonstrationibus
constat. Ita vt si ad cœlestis globi magnitudinē cō
serat/ nihil spaci prorsus habere judicet. Et huius
quidem tam exiguq in mundo regionis quarta fere
portio est que Ptolomeo cognita a nobis animan
tibus icoif. Atq in tris partes hastenus sicca suit.
Europam/Africam/ & Aśiam.

xxviii
quia introductione scribere: quam nos tam in solidō quam plano ne. Sed latius in plano: vbi sicut agrestes signare alueuerunt praecepta predictionum insigniis notare studiimus. Et ut vitellium Rhomanas aquilas, quæ regibus Europæ dominan plam se Europam (qua Rhomanam ecclesiæ profectur) signauius lunulis quod est insignis summi Babilonie Soldan partæ, quæ minor Asia dicitur crocea coloris crucis iuncto solidani Scythia intra ima maximus Asia monte & Sarmaticæ pro insigni habet. Crux rubea præsbyteri Ioannæ (qui et sedem tenet) reperint. Denique in quartam terræ partem ipsorum insignia posuimus. Et quod nō est ignorantum bus crucis signauius sed hæc iam multa facientes.
RVDIMENTA


Asia (quae cæteras magnitudine & opibus logice sime vincit) ab Europa Thaonam fluvio/artem ab Africa Ischmo (qui in Australen plagâ distentus Arabis & Aegprisius num perscindit) ecemini. Hec principissimas regiones habet Bithiniam/Galatiam/
COSMOPHIAE

Capadociam/Pamphiliam/Lidiam/Ciliciam/Armenias maiorë & minorë. Colchiden/Hircaniam/Hiberiam/Albaniæ: et præterea multas quas singilotim enumerare longa mora est. Ita dicta ab eis nomen nis regina.

Nunc ¾o & he partes sunt latius lustratae: & alia quarta pars per Americanus Vesputium (vt in sequentibus audietur) inuenta est: quà non video cur quis iure vetet ab Americae inuentore sagacis ingenii viro Americano quasi American terrâ: fiue Americanam dicendâ: cu Europa & Asia a mulieribus sua sortita sint nomina. Eius situ & gentis mores ex bis bis nis Americani navigationibus quæ sequunt liquide intelligi datur.


Circuit Oceani gurges tamen undique vastus. Qui quos unum fit plurima nomina sumit.

Finibus Hesperius Atlanticus ille vocatur. At Boreæ qua gens fuit Armialis: sub armis: Dicit ille piger necnō Saturo: idem Mortuus est aliis.

XXX
RUDIMENTA

Vnde tamen primo conscendit lumine Titan
Eoum vocant atque Indum nomine pontum
Sed qua deuexus calid polus excipit Austrum
Aethio pumq simul pelagus Rubric vocatur
Circuit oceanus sic totum maximus orbem
Nominibus variis celebratus.
Persecat Hesperia primus qui porgit vndis
Pamphilicus latus Lybiq pretendit ab oris
Sic minor est reliquis/maior quem Caspia tellus
Sulcipit intrante vastis Aquilonis ab vndis
Nomine Saturni quod Thetis possidet equor
Caspium ite sinus simul Hircanoc vocatur
At duo qui veniunt Australis ab equore ponti
Hic supra currens mare Perdicus efficit altum
Eregione situs/qua Caspia voluitur vnda
Fluctuat a st alter Panchia eq litora pulsat
Euxeni contra pelagus pretentus in Austro
Ordine principiis capiens Athlantis ab vnda
Herculeo celebrant quam mete munere Gades.
Celiferas tenet stans Athlas monte columnas
Est primus vastis qui pontus Hibericus vndis
Dividit Europen Lybia comnunis vtricq
Hinc atque hinc statue sunt: ambq litora cernunt
Hec Lybies hec Europes aduersa tuendo.
Gallicus hunc gurges: qui Celtica litora pulsat
Excipit: hunc lequitur Liguri cognomine dictus
Qua domini rerum terris creuere Latinis.
Ad petram leucen Aquilonis ab axe reductus

Mare
Eoum
Indici
Aethio
Picum
Paphis
Paphis
Licum
Caspia
Hircia
Perdicu
Athlan
ticum
Hercu
leum
Gallicu

XXXI
COSMOGRAPHIAE

Quæfretæ Sicaniæ concludit littore curuo
In sulæ sed Cyros proprijs pullatur ab uindis.

Mare

Intra sardonium pelagus Celtumæ refüüs
Indes salis tumidus Tyrrenæ voluitur eistus
Ad partes vergens ustrales/excipit ístum

Thyrre

Sicaniæ gurges solis deflexus ad ortus:
Qui procul effusus Pachynis tenditur orís
Ad Creten summâ (quæ prominet equore) rupem
Qua Gortyna potès medijs qua Phæstos in aruis
Arietis hanc rupem similantem vertice frontem
Pro merito graj Criu dixere metopon.
Hoc mare Gargani concludit Iapygis ora:

Adria

Illinc incipiens extenditur Adria vastus:
Ad Boream penetrans pelago solemç cadente

Ionii.

Ionius pariter sinus hic perhibetur ab orbe/
Dividit & geminas diuerís partibus oras:
Quas tamen extremas coiungit terminus vnus

Uricu.

Ad dextram parté protenditur llyris alma:
Pošt hanc Dalmatici populoru martia tellus
Ad Iguam Aulonie porrectus continet Isthmos
Que tria circundant maria undiç littore curuo
Tyrrenæm/Siculam/ necnon simul Adria vastam
Finibus at proprijs exceptant singula ventos
Tyrrenæm Zephyro: Siculam sed tundit Austros
Adria suçcurrens Eoo frangitur Euro.

At pošt Sicaniæ tractu diffunditur alto

Syrtis

Ad Syrtim pelagus/Lybicis quæ cingitur oris:
RUDIMENTA

Maiores postquam minor excipit: equora longe
Atque sinu gemino resonantia littora pulsant
Finibus a Siculis Cretecum tenditur equor
Ad solis veniens ortus Salmonida poscens
Dicitur Eous qui Crete terminus est.

Post hanc est geminu mare vastus fluctibus atris
Fluctibus Hismanci Boree quod tunditur atris.
Quod ruit aduersus celse de partibus Arcti
Quod prius est Pharii perhibet: hoc littora tægit
Precipitis cafu montis: post vinda secunda
Sidoniis est pelagus: penetrat qua gurgite pontus.
Sicus Arctoas ad partes equore vergens.
Non longe rectus: Cilicum nam frangitur oris.
Hinc Zephiros poscens veluti draco lecit: vndis
Quod iuga montiuagus vastat: situlae fatigat.
Partibus extremis Pamphilia clauditur isto:
Atque Chelidonie rupe cinguntur eodem
At procul hunc zephiros finit Patareide summa:
Post hce Arctoas ad partes aspice rursus.
Aegaeum superat qui fluctibus equora cuncta:
Disperfas vasto qui gurgite Cycladas ambit
Terminat: huc imbrus pariter Tenedos coercet.
Angusta trahit qua fauce Propontidis vnda
Asia: quam supra populis distenditur amplis
Ad Notiam partem: qua latus ducitur Isthmos:
Threicius sequitur post Bosporus ostia ponti:
Hoc nullum perhibent terras angustius orbis

xxxiii
COSMOGRAPHIAE

Simple gades

Esse retum dirimens: hic sunt Symplegades arcus.
Panditur hic ponti pelagus Titanis ad ortus.
Quod petit obliquo Boream solem metu.
Hinc atque hinc medio percurrunt equore colles.
Vnus qui veniens Ascle de parte Carambis.
Dicitur australis: sed contra finibus alter.
Prominet Europæ hunc criu dixere metopon:
Ergo conueniunt aduersi gurgite tanto.
Distantes quanti ternis transire diebus.
Eualeat nauis: bimarem sic equore pontum.
Aspicias similem cornu quod flectitur arcus.
Neruo curuati distento dextra neruum.
Affimilat: recto trahitur nam linea ductu.
Extra quam Boream quo scandit sola Carambis.
Sed formam cornu geminatis flexibus edit.
Littus: quod pontum cingit sub parte sinistra.
In quam Meotis penetrans Aquilionis ad áxes.
Quam Scythig gentes circundant undicí ripis.
Et matrem ponti perhibent Meotidis vndam.
Scilicet hic ponti vis exit gurgite multo.
Cimmeriæ torrens per Bosphoron hic vbi Thauri
Cimmerij gelidis habitant sub finibus imum.
Hec maris est species splendens hác forma prundis.
Est autem prédiximus mare plenum insulis e qui
bus maxime & principaliiores iuxta Ptholomeum.
Hec sunt
Taprobana in mari Indico sub equatore.

Meotis

Thaurus

xxxiv
RUDIMENTA

Albion seu Britannia & Anglia
Sardinia in mari Mediterraneo
Candia seu Creta in sinu Aegeo
Selandia
Sicilia in mari Mediterraneo
Corfuca
Ciprus

Extra Ptolomæum
Madagascari in mari Praefodo
Zamzibar
Iaua in Oceano Indico orientali
Angama
Peuta in Oceano Indico
Seula
Zipangri in Oceano occidentali

He sunt ingentes quas cingit Tethyös vnda
Infulæ adhuc aliæ diversis partibus orbis.
Diverse plures fama laterere minores
Auris difficiles nautis vel portibus aptæ
Quarum non facile est mihi promere nomina veris;
Cepterum vt vnius loci ab altero distantiam cognoscere possis poli eleuatio tibi cuprimis considerranda venit. Annotandum igitur paueis quod( vt ex superioribus liquet ) viuuntibus sub paralello æquinocitiali verténti polus in horizonte est. Eunti autē ad septem trionem eo magis sublevavit polus quanto plus alius quis ab æquatore discesserit. Quæ poli eleuatio res

XXXV
COSMOGRAPHIAE

Proloquium.

gionū & locorum ab equatore distantiae demonstrat; Est enim tantus locorum tractus ab equatore cuius mediarum sustinuntur seire desideras quae est elevatio poli ad zenith eiusdem. Ex quibus milliarii numeris facilis cognitus euadit, unde p numerī eleuatioīs poli multi pliçaueris. Verū tū nō sunt secūdū Ptholomēi sensentiā milliaria a circulo equatoriale ad Arction vbi eō gētiū équales. Nā a primo equatorīs gradu vsq ad duodecimū quilibet graduī lexaginta Italica milliaria cōtinet que faciūt 15 Germanica. Cōmuniter eīn quatuor Italica pro vno Germanico reputant. Et a 12 gradu vsq ad 25 quilibet 59 milliaria facie que sunt Germaniīs. 12, 1. Atque vt res fiat apertior ponemus formulam sequentem.

Gradus | Gradus | Mill. Ital. | Mil. Ger
---|---|---|---
1 | 12 | 60 | 15
12 | 25 | 59 | 14 1/2 1/4
25 | 30 | 54 | 13 1/2
30 | 31 | 50 | 12 1/2
31 | 41 | 41 | 11 1/4
41 1/2 | 51 | 40 | 10
51 | 58 | 32 | 8
58 | 63 | 28 | 1
63 | 66 | 26 | 6 1/2
66 | 80 | 21 | 5 1/4
80 | 90 | 6 | 1 1/2

XXXVI
RVDIMENTA

Et ita quocj ab equinoxiali pluris polos tam an
tarticulum et arcticum gradui latitudinis coiinens
ria variatur. Quod si flere volueris quot ab uno
loco ad alium milliarum sunt/ perpende diligentem in
quibus gradibus latitudinis sunt talia loca & quot
gradus mediet/ deinde vide in formula superiori
quot milliarum talis gradus habeat & multiplica num-
merum milliarum per numerum medium gradui/ atque
milliarum numerus refultabit quae cu italicam fuerit
dividas per quatuor/ & Germanica habebis.
Hec p inductione ad Cosmographia dicit sufficiat
si te modo amonuerimus prius/nos in depingendis
tabulis typi generalis no omnimodo sequitos esse
Ptolomei/ presertim circa nouas terras vbi in car-
tis marinis aliter animaduerimus equatorem cotti
tu & Ptolomeus fecerit. Et pinde no debet nos
statim culpere qui illud ipsum notauerint. Consul
tem fecimus quo Ptolomei/ alibi cartas marin
eas sequi sumus. Cu & ipse Ptolomeus quin-
to capite primi libri. Non omnes continentis par-
tes ob sue magnitudinis exessum ad ipsius perus
nisse noticiam dicit/ et aliquas quemadmodum se
habeant ob peregrinantium negligentiam libri mi-
nus diligentem traditas/ alibi esse quas aliter atque
alia aliter se habere contingat ob corruptiones & mutatio-
nes in quibus p parte corruisse cognitae sunt. Fuit
igit necesse (quod ipse libi etiam faciundus ait) ad nos

Note

Ptolomei

XXXVII
APPENDIX

uas temporis nostri traditiones magis intenderes.
Et ita quidem temporaui mus rem vt in plano cire
ca nouas terras & alia quepiam Ptholomei in so-
lido vero quod plano additur descriptione Ameri-
ti subsequenterem lectati fuerimus.

APPENDIX

Annecatumus adhuc superioribus antea reces-
pitui canamus eluationis poli atque ipsius zenith ac
centi horizontis & climath quadrante velut parer
gon & quoddà corolariu. Quamuis si recte con-
siderauerimus is quadrans de quo dicemus non sit
ad has res impertines. Colmographi eiu vel maxi-
me poli supra caput eluatione/zenith/ & terre cli-
 mata cognoscere oportet. Format itaque idem qua-
drans hoc pacto. Diuide quietuncq circulu in par-
tes quatuor/ita quod duæ diametri le in centro ad
angulos rectos inter seeent:quarû vna (que altera
fui parte pinnulas habet)axem polori müdi/ & ale-
tra'equatorem significabit. Deinde eá partè circuli
que est inter semiæxem pinnulas habentem & alte-
ram semidiametrum in partes.xc dividat/ataque pol-
ita in totidem/ figalæi perpendicularû ad cêtrum &
paratus erit quadrans. Cuius hic est vsus. Verte
æt ut pinnulas foramina poli directe videas &
ad quodclima atque gradu perpendicularû
ecident/eo ïpo climate et eluationis gradu tua re-
gio/quinertia zenith atque horizontis centro existit.
Haec deus exequiti capita propitia hic ipsas longinquas expaciationes sequeter introducamus vel iputit singulorum factorum exitum circa institutis tradentes.

Finis introductionis

xxxix
Philæsius Vogæsignæa

Lectori

Nilus: Rura papirifero qua florent pinguiæ Syro
Lacus: Et faciunt Lunæ magna fluenta lacus
Lunæ: Adextris mœtes fūt lus/Danchis/quoqu Mascha
Ius: illorum Aethiopes inferiora tenent
Dâchis: Aaphrica consurgit quibus e regionibus aura
Mas. Aflans cum Libico seruida regna Notho.
Aethiopes: Ex alia populo Vulturnus parte calenti.
Aphricus: Indica veloci per freta calle venit.
Libonis: Subiacet hic equo noctis Taprobana circro
Vulturus: Bassæc Prašodo cernitur ipsa falo
Taprobana: Aethiopes extra terra est Bassamæ marinæ
Maræ: Non nota e tabulis o Ptholomæ tuis.
Prašo: Cornigeri Zenith tropici cui cernitur hirci
Pars: Aeq comes multe funditor ipsus aquæ.
aphriæ: Dextrorum immenso tellus iacet equore cincta
fluenta: Tellus/quam recolit nuda caterua virum
Ameri: Hanc quem clara suum iacet Lusitania regem
ge: Inuenit missa per vada classæ maris.
Sed quid plura: sitū/gentis mores repertæ
Candide sycero voluas hunc pectore lector
Et leges non nafum Rhinocerontis habens

o Tlado.
QUATVOR AMERICI VESPVTII NAVIGATIONES

Eius qui subseuente terrarum descriptio,
ne de vulgari
Gallico in
Latinita
trafatu
lit.
Decastichon ad lectorem:

Aspices tenuem quisquis fortasse logiam
Nauigium memorat pagina nostra placenta;
Continet inuentas oras/gentes recenter
Letificare sua que nouitate queant.
Hec erat altiloquo provinciâ danda Maroni
Qui daret excellent verba politar e rei.
Ille quot ambiuit freta cantat Troius heros:
Sic tua Vesputi vela canenda forent.
Has igitur lectu terras visurus/in illis
Materiam libra: non facientis opus:
Item distichon ad eundem
Cum noua delectent fama testante loquaci
Que recreare queunt hic noua lector habes

o Tiado.
Illustrissimo Renato Iherusalem
& Sicilie regi/duci Lotho
ringie ac Barn. Amel
ricus Vespuitius hus
milie reuerentia &
debita recolere
dationem:

Fieri pot illustrissime Rex vt tua maiestas mea
ista temeritate ducatur in admiracione: propterea
quod haec litteras tam prolaxas adte scribere non
subuerear/cum tamen sciam te continuo in arduis
consilii & crebris republice negotio occupatis
limum. Atque existimabor forte non modo presum
ptuosus/sed etiam ociosus:id mihi muneres vendos
vocat tuos minus coovenientes non delectabili sed barbrio
presus stilo (veluti amusus ab
humanitatis cultu alienus) ad Fernandu Castilie
regem nominatim scriptas/ad te quoem mittam. Sed
ea quae in tuas ytutes habeo confidentia/& coperit
sequenti rerum nec ab antiquis nec ab neotericiis scri
ptarum veritas me corat. M. fortass excusabunt:
Mouit me imprimis ad scribendum presenti lator
Beneuenutus. M. humilis famulus/ & amicus me
us no pœnitendus/qui dum me Lisbone reperiret
precatus est vt.t.M. rerum per me quiatuer profectionis
onibus in diversis plagis mundi visarum/participem
facere vellem. Peregi em bis binas navigations ad
noeas terras inueniendas:quarum duas ex mandato
Fernandi inclyti regis Castilie per magnu oceani

XLII

Inclytissime rex sciat t. M. quod ad has ipsas regiones mercadis causas primis venerim. Dumque per adrennii revolutionem cis rebus negociosus essem b uitij.
ANTELOQVVM

et varias fortunemutatiōnes animaduerterem /atque
vide rem quo pacto caduca & transitoria bona ho-
minem ad tempus in rotē lūnum tenerēt/ & deinde
ipsum precipitarent ad imū qui se possidere multa
dicere poterat: constitui mecum variis talīrum rerum ca-
sibus exanguis istiusmodi negotia dimitte/et mer-
orū laborum finem in res laudabiliōres ac plus stabī-
bles ponere. Ita disposerui me ad varias mundi para-
tes contemplandas/ & diuerfas res mirabiles viden-
das. Ad quā rem se & tempus & locus oportune ob-
tulit. Ipse ēm Castiliē rex Fernandus tunc quatuor
parabat naues ad terras nouas occidentem versu-
discooperiendas/cuius celsitudo me ad taliam inuen-
gandā in ipsam societāte elegit. Et soluimus vigesima
daie Maiī, Mcccc.xcvj.de portu Calīcē iter nost-
rum per magnū oceani sinū capientes: in qua pro-
sectione.xvij.confīmaimus mensēs/multas inuen-
nientes terras firmas/ & insulas pene innumerā-
les votārumō habītātas/quarū maiores nostri men-
tionem nullam fecerunt. Vnde & ipsos antīquos
taliū non habuisse noticiā credimus. Et nisī memori-
sia me fallāt memīni me in aliquo legere/quod ma-
tre vacuēm et sine hominibus esse tenuerint. Cuius
opinionis ipse Dantes Poeta nostèr sūt/vbi duo
deiigelīmō capite de inferis loquens Vlissī morte
cōlōgit: Quae autē mirabilia viderim/in sequens
seculum processum.T,M.intelliget.
PRINCIPIVM

TERRARVM INSULARVMQVE VARIA RUM DESCRIPTIO: QUARUM VESTITI NÖ MEMINERIT
AUTORES NUPER AB ANNO INCARNATI DOMINI MCCCC XCVI.I.BIS GEMINIS NAUIGATIONIBUS IN MARI DISCURSIS/
INVENTARU: DUABUS VIDELICET IN MARI OCCIDENTALI PER
DOMINI FERNANDUM CASTILIG/RELIQUISvero DUABUS
IN AUSTRALI PONTO PER DOMINI MANUELÉ PORTUGAL
LIÉ SEVENISSIMOS REGES/ AMERICO VESPUCIO UNO EX
NAUCERIS NAUUIUMQ; PREFECTIS PRECIPIO/SUBSEQUÉ
TEM AD PRESSATUM DOMINI FERNANDUM CASTILIG RE
GEM/DE HUIUSMODI TERRIS & INSULIS EDENTE NARRATIO
NEM.

ANNO DOMINI M. CCCCG.
XCVI.I.XX. MENSIS MAJ DIÉ/NOS CUM
III.IX. CONSERVANTIC NAUIBUS CALICICUM
EXEUNTES PORTUM/AD INSULAS Olim
FORTUNATAS/NÚC VERO MAGNAM CAN
NARIAM DICTAS) IN SINE OCCIDENTIS HABITATI
POSITAS IN TERTIO CLIMATE:SUQ QUO/ EXTRA HOS
RIZONTEM EARUM/FE.XXVII.GRADIBUS CÓ DUOBUS TER
TIIS/SEPTENTRIONAIS ELEUAT POLUS/DISTARESP AB HAC
CIUITATE LISBONA IN QUA CÓSCRIPTUM EXTITIT HOC PRÉ
SENS OPUSCULUM. CC.LXXX.LEUCIS: VENTO INTER MERIS
DIEM & LEBECCIUM VENTUM SPIRANTE/CURFU PRIMO
PERTIGIMUS. VBI (NOBIS DE LIGNIS/AQUA/CETERIS QI NE
CESSARIIS PROVIDENDO) COSUMPTIS OCTO SÉRÉ DIEBUS
NOS (FACTA IN PRIMIS AD DEUM ORATIONE) ELEUATIS DEU

XLV
NAVISAGIO

hinc ventotraditis velis/navigatam nostra per
Ponente incipientes: sumpta vna Lebeccin quaeta:
tali navigio transcurrimus vt.xxvij. vix clapis die
bus terris cuida applicaremus: quæ firmæ fore existi
maimus. Distant Canariæ magne ab insulis. M.
(vel circiter) leucis:extra id quod in zona torrida
habitat est. Quod ex eo nobis constitit: Qp Septe
trionale polu: extra huiusce modi telluris horizonte
xvi. gradibus se eleuare/magis occidentale. lxxv.
q Canariæ insulas gradibus existere coșpexm
mus: put instrumenta oia moltabat. Quo i loco (ia
dis de prora áchoris) clasæ nostra/leuca a littore cu
media distanté/restare coegimus: nonnullis solutis
phælis armis & gete stipatis/cu quibus ipm fte:
ad littus attigimus. Quo q primi puenimus: gant
nudam secundu littus euntim innumerae perepi
mus. Vnde no paruo affecti suimus gaeedi. Omnes
em qui nudi incidere conspiciebant: videbant quo
q propter nos stupefacti vehementer esse. Ex eo
(vt arbitror)q vestitos/alteriusq effigie q foret/
nos esse intuiti sunt. Hic postq nos aduersis co-
gnoverunt/omnes in propinquù monte quemad
aufugerit:a quo tunc nec nutibus nee signis pacis
et amicitia/qlvs vt ad nos accederet allici potuerit.
Ir ruente vero interea nocte/nos classem nostra ma
tuto in loco (vbi nulla marinas aduersus procellas

tuta residentia foret) cōsidere timentes: cōvenimus
PRIMA

et hinc (mane facta) discenderamus: exquirere
mus e portu quempiam / vbi nostras statione in tu
ta collocaremus naues. Qua deliberatiæ arrepta
nos vento secundum collæ spiranti traditis velis / post
vel (visu terram ipsum sequendo / atque ipso plage in
littore / gentes continuae perciendo) duos integros
navigauimus dies: locum nauibus satis aptum com
perimus. In quo mediate tantù leuca distantes ab ari
da / constitimus: vidimus eß tunc inibi innumerabi-
lem gentiù turbam / quam nos cum inus inspicere/
& alloqui desiderantes: ipsumet die littori cum cymo
bis & naviculis nostris appropriauimus: necnon &
tunc in terram exuimus / ordine pulchro. xl. circiter
virì huiusceendi gente se tamen a nobis e còfo,
tio nostro penitus alienam prebête. Ita vt nullis ea
modis ad colloquiù comunicationemue nostrâ alli
cere valuerimus: præter ex illis paucos / ës multos
post labores ob hoc susceptos / tandem attraximus
ad nos dando eis nolas / specula / certos cristallinos
alia e similia leuia/ qui tum secuti de nobis effecti/
conciliatum nobiscum / necnon de pace & amici
cia tractatum venerunt. Subeunte autem interim
nocet / nos ab illis nofnet expedientes (relictis eis)
nostras regressi sumus ad naues. Postea vero sub-
sequentis summo diluculo diei / infinitam in littora
virorum & mulierum paruulos suos secum ve-
stantium gentem rursum confueximus cognou-

XLVII
NAVIGATIO

multum multitudiné illum supellectilem suam secum deesse totam /qualem infra suo locum diceó. Quorum plures plurimum terre appropiauimus se met in equor pro ficientes (cum maximi natatores existent) quantus est baliste iactus nos venerunt natantes obuiam /iusticia nos humaniter atténs ea securitate & confidentia seipsum inter nos commiscuerunt ac si nobiscum diutius ante convenisset & pariter frequentius practicaussent : pro qua res tunc per parum oblectati sumus. De quorum moribus (quales eos habere vidimus )hic/quando quis dem fecomoditas offerit/interdum etiam interlinerium

De moribus ac eorum viuendi modis.

VANTVM AD VITAM EORVM

q mores omnes: tam mares quœ fœming nu dipenitus incedunt tectis non aliter vestendis quœ cum ex vtero pdierunt. Hij mediocris existentes statur multum bene proporcionati sunt quorum caro ad rufedine (veluti leonû pili ) ygit: qui fœq vestimentis operi mearet albi (credo) tæf nos ex tarét. Nullos habét in corpo pilos pterq crines quæ

XLVIII
PRIMA

peceros nigreleste sc gerunt & prseentim foemig
que propterea sunt tali longo nigro crine decori.
Vultu non mult speciosi sunt quam latas facies pars
taris ad simillatas habet nullos suib sinunt ut
super cilis oculorumque palpebris ac corpore tarto
minibus demptis excrescere villos ob id quod habitos
in corpore pilos quid bestiale brutale sc reputant.
Omnes tain viri & mulieres suue meando suue cur-
rendo leues admodum atque veloces existit qm
frequenter experti suumus in se etiam mulieres
aut duas pccurcre leucas nihiliputat & in hoc nos
christiciolas mult suppellectunt. Mirabiliter ac utra
sc ut credible natant:multo quoc melius foemig
maiali quod frequenti experimento didicimus
cum ipsas etiam foeminas omni prorsus sustentamis
ne deficiantes duas in equore leucas pernatare per
spezimus. Arma eorum arcus sunt & sagitte quas
mult supellet fabricare norunt. Ferro metalli sc
alijs carent: sed pro ferro bestiarum piscium dues
tibus suas sagittas armant quas etiam (vt fortiores
existant) vna quoq secpe prueurunt. Sagittarum sc
sunt certissimi. Itavt quicquid voluerint iaculis fuis fere
ant nonnullius in locis mulieres quoc optime sa-
gittatrices extant. Alio etiam arma habet velut lan
ceas praecutatas sue fudes necno & clauas capita mi
rifice laborata habentes. Pugnam potissimut affue
et sunt adversus suos alienigena lingue confines com
NAVIGATIO

tra quos nullis parco(ni) et eos ad aetorae tormenta referentes multum crudeliter dicum. E(m)c in prœlium propter suas secum vxores(on beligeraturas/led eorum post eos necessaria perlatus/ras)ducit/ob id qu'à sola ex eis mulier tergo libi plus imponere possit /& deinde.xxx.xl.ve leucis subue here(prout ipsi lepe vidimus) cep vir(etime validus) a terrà leuare queant. N nulla bellì capita nullo qui prefectos habent/quinymmo(cù eorum quilibet ex se dominus extet)nullo feruato ordine mentat. N nulla regnandi dominiiue suum extendendi aut alterius inordinaté cupiditatis gratia pugnant sed veterem solum ob inimiciciam in illis ab antiquo insitam: cu iusquidem inimici ciç causam interrogati nulla alia indicant nisi ut suorum mortes vendicent antecelsorum. Hec gens sua in libertate vivens nulliç obe diens nec regem nec dominii habet. Ad prœlii auté se potissimum animant & accingunt cum eorum hostes ex eis quempiam aut captiium detinent aut interemerunt. Tüe em eisdem captiui interemptiuae consanguineus senior quisç exurgens exit cito in plateas & vicos passim clamitans inuitans omen & suadens ut cum eo in prœlium consanguinei sui necem vindicaturi proterent:qui omnes copassio ne moti mox ad pugnam se accingunt atç repente in suos inimicos irruunt. Nulla iura/nullamue iusticiam feruant ;malefactores suos nequaquam pu
PRIMA

niunt/quumymmo nec parentes ipli paruulos suos edocent aut corripiunt. Mirabiliter eos inter sele conquestionari nonnun čs vidimus. Simplices in lo quela se ostentant, verum callidi multum atęs astus ti sunt. Perraro /& summis voce loquütur / eisde quibus vtimur accentibus vtentes. Suas vtplurimap sum voces inter dentes & labra formantes aliis vtuntur vocabulis čs nos. Horu plurimę sunt ydio matu variates quonia a centenario leucarum in centenariu diversitatem linguarum se mutuo nulla tenus intelligentiu reperimus. Comestandi modu valde barbarum retinet; nec quidem notatis man ducant horis/sed siue nocte siue die quotiens eden di libido suadet. Solo manducantes accumbunt/ & nulla mantilia nullaue gausapa (cũ lineamentis pan nilčs ališs careant) habent. Epulas suas atęc cibaria in vascuta terrea quę iplimet cōsingunt/aut in medias cucurbitarum testas ponunt. In retiaculis quibusdam magnis ex bombice factis & in aere sulpē sis dormitant: qui modus čs quis insolitus & aspersis or fortassis videri queat /ego nihilominus talē dor mitandi modum suaem plurimum iudico. Etenim eum in eisdem eoru retiaculis mihi plerumč dor mitasse contigerit/in illis mihimetipi melius č in tapetibus quas habeamus esse persensi. Corpore valde mudi ċut et expoliti/ex eo čp seipos freuntissi
NAVIGATIO

me lauant. Et cum egestum ire (quod salua dixerim reuerentia) coacti sunt omni conamine nitunet ut a nemine perspici possint: qui quidem in hoc quanto honesti sunt tanta in dimittenda virina se in mun
dos inueredendos tam mares 


cum liquidem illos nobiscum loquentes & coram positos suam impudicissime virnam sepium emni-
xiste perspexerimus. Nulla legē/nullū legitimī the-

ri sœcitus i suis cōnubis observāt/quinymmo quot
quot mulieres quίsc ἐcūcupiscit/tot habere & dein

de illas quandocō quōt volēt(abscq hoc qu id pro iniu

ria aut opprobrio habeant) repudiare potest. Et in

hac re vtq tam viri quī mulieres eadē libertate fru-

untur. Zeloē parū/libidinosi vero plurimum extāt

magis prosequēē quam masculi: quarum artificiavt in sa-
tiabili facilis satiātis libidini hic honestatis gratia

subtendendo cenamus. Ēg ipse in generandis paru-

lis sōcundē admodū sunt: nec quī grauidē effectē

sunt penas aut labores euitant. Leuissimo minioē

dolore pariunt. Ita vt in cæstīnum alacres sānateqē

vbiq ambulant: prēservēm post partū in flumen

quodiam sēe ablutē vadunt/tumq sānē mundā

stā inde (velut pisces) apparent. Cruelitati āt aē

doio maligno adeo dediē sūt/ vt si illas sūi fortiss

exacerbauerint viri/subito certū quoddā efficium

maleficīq: cū q ē pīngenti ira, pprioē fetus i pprīs vter

ris necāt abortiūtēq deinde: cuius rei occulōe infini-

LII
PRIMA

orum paruuli peteant. Venustio & elegantione cópacto corpore sunt lta vt in illis quitqué deforme nullo inspici modo possit Et quāuis disnude ambulent inter sāmina tamen earum/ pudis bunda sic honeste reposta sunt vt nullatenus vide ri queant preterquam regiuncula illa anterior quā verccundioire vocabulo pectuclum ymū vocas mus quod & in illis vtīcq non aliter ōhoneste nas tura ipsa videndum reliquit Sed & hoc nec quidē curant quī vt paucis expediam nō magis in fūorū visione pudendorū mouentē ὡς nos in oris nostri/ aut vultus oſtententatioēe. Admirandā per valde rem ducerent mulierē in eis manimillas pulpas ve laxas aut ventrem rugatū ob nīmiū partū habentē cum omnes equē integre ac solide post partū sem per appareant ac si nūcēpeperissent. Hee quīdem se nostri cupientissimās esse monstrabant. Nemī nem in hac gente legem alīquam obseruare vidiō mus nec quīdem iūdeī aut maūri nuncupari folīs de qneuut cuin ipsīs gentilībus aut pagānis mul to deteriores sunt Etenim nō persequimus ὡ̣ sacrificia vīla faciant aut ὡ̣ loca orationisue domos aliō quas habeant. horum vitā quē omnino voluptus osē estEpycuream existimo illorum habitationes singulīs ipsīs sunt communes/ ἵππες illorum do múmus campanarum instar costrucētē sunt firmiter ex magnī arboribus solidate palmarū solīs de super
NAVI\textit{GATIO}

contecte & aduerfus ventos & tempestates tutill
me nonullis in locis tam magne vt in illar\textit{u} vnica
sexcentas esse personas inuenerimus. Inter quas
octo populosissimas esse c\textit{o}perimus sic vt in eis esse
sent habitantem pariter animaru decem milia. Octo
n\textit{n}io quolibet aut septennio suas sedes habitatione
ue transferu\textit{t} qu\textit{i} ei\textit{us} rei causam interrogati natu*
rale responsum deder\textit{it} dicentes qu\textit{e} phebi vehem\textit{E}
tis estus occasione hoc faceret ob id qu\textit{e} illorum
\textit{giore in eodem loco residentia aer infectus corru-
ptus qu\textit{e} redderetur que res in eoru corporibus var-
as causaret eg\textit{r}itudines que quidque eoru ratio n\textit{o}
\textit{mal}le sumpta nobis visa est Eorum diuiti\textit{g} fut varias
color\textit{u} a\textit{u}ium plum\textit{e} aut in mod\textit{u} lapillorum illo\textit{r}
quos vulgariter pater no\textit{st}er vocitamus lamine si-
ue calculi quos ex piscium offibus lapillis ve viridi-
bus aut candidis faciunt & hos ornatus gratia sibi
ad genas labia vel aures suspendunt. Alia quoque si-
\textit{mil}ia fr\textit{u}tilia & leu\textit{ia} pro diuiti\textit{is} hab\textit{et} que nos omi-
no par\textit{u} pendebamus. \textit{Com}mutati\textit{o}ibus aut merci-
moni\textit{is} in vendendo aut emendo nullis vtun\textit{e} qui-
bus satis est quod natura sponte sua propinat. Au-
rum vniones ioc\textit{a}la c\textit{e}ter\textit{a}q\textit{g} simil\it{ia} que in hoc Eu-
ropa pro diuiti\textit{is} habemus nihil extimant imo pe-
\textit{n}itus sper\textit{u}nunt nec habere eurant. In dando sine
naturaliter libera\textit{li}\textit{s}imi sunt vt nihil quod ab eis ex-
\textit{pet}atur abnegat. Et quemadmodum in dando lis
PRIMA

herales sunt sic in petendo & accipiendo cupidissimi postea se cuquam amicos exhibuerint. Maximum potissimum quae amicici sunt signum in hoc perhibent & tam uxores & filias proprias amicos suis pro libito habendas offerunt in qua re parentem vter qui virginem ad concubitum suum quisquam dignatur & abduct & in hoc suam inter se amicam potissimum cœciliari. Varis in eorum defessu multos modis exequijs vtuntur. Porro suos nonnulli defectos in humo cum aqua sepiulut & inhumanum illis ad caput victualia ponentes quibus eos possit velci & alimentari putant nullum deinde uter eos alium planetum aut alias cerimonias efficientes. Alii qui hujusdam in locis barbanissimo atque inhumanissimo sepeliendi vtuntur modo. Quippe eorum quae piam mortis momento proximum autumant illi eius propinquiores in siluam ingentem quamdam deferunt ut in bombiceis reticulis illis in quibus dormiant impositum & recubant ad duas arbores in aera suspendunt ac postmodum ductis circa eum suspenendum vna tota die choreis irrudente iterim nocte ei aqua victum alii ex quatuor aut circit dies viuere qat ad caput apponunt & deinde sic inibi solo pendente relieto ad suas habitatioes re deunt quibus ita pactis si idque egrotus possea mada tect & bibat ac inde ad coualescentiam sanatatemque.

LV
NAVIAGATIO

redeat & ad habitationem, priam remeet illa eum affines ac propinquos cu maximis suscipiunt cernim
inis. At perpanci suuit qui tâ grande præterant per
ciculû cu eos ibidem nemo postea visitet qui si sice
inibi forsan decedût nûlla aliam habent postea se
pulturâ. Alios quoque complures barbaros habent
ritus quos euitande plixitatis hic omitterimus gra-
tia. Diuerâtis variis medicamibus in suis morbis
& ègritudinibus utique que sic a nostris discrepant
& discoueniunt ut miraremur haud parù qualiter
inde quis euadere posset Nempe vt frequenti dili-
cimus experientia cu eoru quempià febricitare co-
tigerit hora qua febris eum asperius inquietat ÿm
in frigentissimâ aquâ immergût & balneant post-
modum per duas horas circa ignem validû (do
nec plurimum calefact)currere & recurrere cogút
& postremo ad dormiendum deuerunt quoquis
dem medicamento complures eoru sanitate restitut
vidimus. Dietis etià (quibus tibus quatuor ve die
bus absâ cibo & potu perevertunt) frequentissimis
utique. Sanguine quoque libi persevera cominuuit nó
in brachjus (lalta ala) led in lumbis & tibiarû pul-
pis. Seipsum etiam ad vomitû cu certis herbis quas
in ore deuerunt medicaminis gratia plerãc proco
cant & multis alios remedîjs antidotischt utique que
longum dinumerare foret Multo sanguine multos
et pleninatico humore habundant cibariorû suoni
PRIMA

occasiōe q ex radicibus/frudibus/herbis/varijtos
piscibus faciunt. Omni farris granorum aliorum se
mine carent. Comunis vero eorum pastus siue vi-
est arborea radix quedam est qua in farrīnā satis
bonā comīnunt & hanc radicum quidam eorum
fucha alij chambi alij vero ygnami vocitant. Alīs
carnibus/prterqj hominū per raro vescent in qui
bulquidem hominū carnibus vorandis sic in huma
ni sunt & inmanueti vt in hoc omnē seralēm omn
nem ve bestiali modū superent. omnes em hostes
suos quos aut perimunt aut captos detīnet tam vi
ros ĉf fæminās indistincte cum ea feritate deglutis
unt vt nihil serum/nihil ve brutū magis dici vel in
spici queat quosquidē sic eferos imanesciofore / va
rīs in locis mihi frequentius contigit alpesíxte mi
rantibus illis q inimicos nostros sic quoc nequās
quam manducaremus. Et hoc pro certo maiestas
vestra regia teneat Eorēs consuetūdines(quas pluri-
mas habent) sic barbare sunt vt hic nunc sufficien
ter satis enarrari nō valeāt. Et qm in meis hisce bis
geminis nauigātibus/tam varia diuerſac q tam
a nostris rebus & modis diuertera perpexi Idcir
co libellū quēpiam (quē quattuor dietas siue quas-
tuor nauigations appello) cōscribere paraui cons
scripſia in quo maiorem rerū a me viarū partē di
stincte satis/iuxta ingeniōli mei tenuitate /collegi.
Verūtamen non adhuc publicauī. In illo vero quā

LVII
NAVIGATIO
omnia particulariter magis ac singillatim tangent
idcirco vniuersalia hic lollumodo, plequens ad na-
igationem nostrae prorern pericientia a qua pau-
lisper digressus fueram iam redeo.
IN HOC NAVIGUI NOSTRI PRIMORdoi
notabilis commoditas res/novi viridim idcirco (vt opin-
nor) eorum lingua non capiebamus prater quonun
la aut denotantia/ quod nonnulla indicia in tellure il
la esse monstrabant. Heccine quo tellus quo ad sui
situri positionibus tam bona est vt vix melior queat.
Cocordauimus aut vt illa derelinquetes logius nau-
igationem produceremus. Qua unanimitate suscep-
ta/nos dehinc arida ipsum collateraliter semp seta
tes necno gyroscitos scalasplures circuuentes
& interim cum mis variis locis illorum incolis co
ferentia habentes/tandem certis post aliquot dies
portui cuida applicuimus/in quo nos gradia a peric
culo alitono spiritui co placuit eripere. Huius em
modi portu cfprimus introgressi fuimus populatio
ne vna eor hoc est pagus aut villae super aquas (vt
Venetie) positae coperimus/in qua ingetes.xx.edes
aut circiter erat in modu campanarui vt pretactum
est effecte atque ligneis vallis solidis & fortibus
firmiter fundate/ pre quarum porticibus leuatici pote
tes portecti erant per quos ab altera ad alteram tam
c per copactilliam stratam transitus erat. Igit hu-
iulmodi populationis incolae cfprimus nos intuitu ita
PRIMA

funt magno propter nos timore affecti sunt /& obs
rem suos confessim pontes omnes contra nos eleu
uerunt & se elle deinde in suis domibus addiderunt. Qua
rem spectabantibus nobis & haud parz kidn
tantibus ecce duodecim eorum lintres vi circuiter / sin
gulas ex solo arboris caudice cautas (quo nauium
genere vtun?) ad nos interim per equor aduentare
conspeximus / quod nauceri effigiam nostra habi
unc mirantes ac se esse circun nos vindicas recumseren
tes nos eminus alpiciebat. Quos nos quocep ex ad
uerfo prospicientes plurima eis amici sigla des
dimus/ quibus eos vt ad nos intrepid accederent/
exhortabamur / quod in efficere coteferunt. Qua
rem nobis peipientibus mox ad eos remigare incep
imus / qui nequecep nos prei solati fuit quinquammo
oem confessim in terram fugerit datis nobis interim
signis vt illos paulisper expectaremus. Ipsi enim exte
plo reuersuri forent. Tum cep in monte quendeppe
rauegrand pe educatis bis octo iuuencup & i lintribus
suis pstatis vna secu alluptis mox yfus nos regres
li fuit. Et post hce ex iuuencup ipsi quor i lingal na
uiu nres poluerit / que faciedi modu noshaud parz
admirati tuc frimus / put vraafatis ppedere pt mas
estas. Ceteruccep cui lintribus suis pmissis int nos na
uelcep nral comixti fuit & nobiscu lic pacifice locuti
fuit ut illos amicos nros fidelissimos esse reputation
mus. Intea y o ecce qucep ex dominibus eorzi pmcoratus

LIX
NAVIGATIO

gens non modica per mare natrans aduentare cecit quibus ita aduenientibus & nauibus niris iam approquinquare incipientibus nec tui proinde miles quibus adhuc suspicaremur tenui ad earudè domo.

tu cor sores/velulas nönullas cöspeximus quae im maniter vociferantes & coelü magnüs clamoribus implentes situmet/in magne anxiéttatis indiciü pro prios euellebat capillos quæ res magnä mali suppes
citionem nobis tunc attulit Tumqu subito factt ü est vt iuuencule ille quas in niris imposuerant nauibus mox i mare pliserent ac illi qui in tintribus erant se se a nobis elongantes mox contra nos arcus suos intenderent nos curā durissime sagittaret. Qui quo a domibus per mare natantes adueniebant singuli latentes in vndis lanceas serbant ex quibus eoru proditione cognosvimus Et tum no solum nosmet
magnanimiter defendere verü etiam illos grauiter offendere incepimus Ita vt plurès eorum fasselos cum strage eoru no parua perfregerimus & penius
	us in ponto submerserimus ppter quod reliquis fasselis suis cü damno eoru maximo relictis per ma

tre natantes omnes in terram fugerunt interemptis ex eis. xx. vel circiter vulneratis quo pluribus & ex nostris quicq dumtaxat lesis qui omnes ex dei gra
tia incolimitati restitutü fü Comprehédimus autet & tum ex pretactis iuuenculis duas & viros tres ace dehine domos eoru visitauimus & in illas introd

LX
PRIMA

nimus ver eis quitquā(nisi vetulas duas et egrov tantem virū vnīcu) non inuenimus. qualsquīē eos rum domos igni succendere non voluimus ob id quī cōscientiē scrupulū hoc ipsum esse formidabamus. Post hēc antem ad naues nostras cū pretactīs captius quīng remerauimus & eiōdē captiūos/preterius iuuenculas ipsas/in compedibus ferreis alligā uimus. Eēde yō iuuencule captiūorēs viro re vynus peruenienti nocte a nobis subtilissīme euasūtū his itaque peractīs. Sequenti die concordāuimus vt relictō portu illo longius secundū collem procederē mus percurriā<ēs. lxxx. fere leucīs gentem alīa quam dam cóperimus lingua & conviceratiōne pēnitus a priore diuerfam Cōnēimus<ē vt classem inibi nos trām anchorāremus & deinde in terram ēsam/cū nauiculis nos trās accederēmus. Vidimus autē tunc ad littus in plaga gentĭu turbam. uij. M. personarū vel circiter existere qui cū nos appropriare persen serunt nequaē nos prēstolati sunt quīnymmo cun ētis quē habebant relictīs omnes in siluās & nemo ra diffugerūt Tum vero in terrā prosciētēs/ē viā vnam in siluās tendēntē /ētus est baliste iactūs /p ambulantes mox tentoria plura inuenimus quē ē bi dem ad piscandū gens illa tetenderat & in illīs cos pios ad de coquendas epulas suas ignes accende rat/āpectō bestias ac ples variarī specierē piscēs iam aslābat Vidimus autē inibi certū altari animal

LXI
NAVIGATIO

quod erat demptis alis quibus carebat serpenti si multimù tamò bruto ac siluestre apparebat vt eius nò modicù miraremur seritate. Nobis vero per ea dem tentoria longius pgre dientibus plurimos hu ius cementi serpentes viuos inuenimus qui ligatis pe dibus ora quoq; finibus ligata ne eadè aperire pos sent habebat put de canibus aut feris alís ne mot dere queant effici solet. Aspectù tam serù eadè prè seferùt animalia vt nos illa venenosa putantes nul latenus auderemus cotingere. Caprodis in magni tudine brachio vero cu medio in longitudine equa lia sunt. Pedes longos materialesq; multù ac fortis bus ungulis armatos necnon & discolorè pelle dis ueròlimum habèt rostrùq; ac facìè veri serpètis ges tant a quoq; naribus vloq; ad extremà caudam se raz quedà per tergu fic protendi vt animalia illa ve ros serpentes elle iudicaremus & nihilominus eis gens òfata velciè. Panè suò gès eadem ex piscibus quos in mari piscant efficiùt. Primù em pisciculòs iplos inferuentl aqua aliquantisper excoquùt. De inde vero contundunt & còpis tant & in panes co glutinant òs super prunas in super torrèt & rando inde postea manducat holquidè panes pòtes òs bonos esse repimus. Alia quoq; òmìta eleculèta ciò bariac; tam in fructibus òs in varijs radicibus resi nent ò longù enumerare foret. Cum aut a filius ad òs au fugerât nò redirèt nihil de rebus eorùq; vt amò

LXII
PRIMA

plius de nobis securi ficeret austerre voluimus quod
nymmo in eis de eor tentorijs gmita de reculis no
stris in locis quiprèderea possent derivinquetes ad
naues nras sub noc€e repedauimus. Sequenti pro
die ex orini tian inciperet infinita in littore gen
se existere seeplus ad eis in terr apacessimus.
Et quum se nri timidos ostederet seipos uiter nos
permiscuerit & nobiscu practicare ac cueferi cu
securitate ceperut amicos nros le plurimu fore per
simulantes/insulaeque illic habitatioes eor non
esse/ver qu pischandi gru aduenerat.Et idcirco rogi
tates vt ad eor pagos cu eis accederemus ipi etem
nos tam€ amicos recipere vellent et hac quide de
nobis cocepert amicicia captiuror duor illor qu
nebamus occisioe/qui eor inimici erat. Vfa qu
eor magna rogad importunitate coeduausmus.
xxiiij. ex nobis cu ilip bono appatu cu stabili mente
si cogeret necessitas)oes strenue moni Cu itaque
obiscu per tres extitissent dies & tres cu eis & plag$a
terrac illa excussemus leucas/ad pagiun noue
dumtaxat domon venimus vbi cu tot tam€ bar
baris ceremonijs ab eis suscepti suimus vt scribere
penna novaleat/vtputa cu choreis & caticis acpli$e
tibus hilaritate & lectica mixtis/necno cu scripui ci
baris) pennis. Et ibide nocte illa requievimus vbi
apprias vxores suas nobis cu qij paiqalitate obtule
sit/qui quide nos sic iporue sollicitabat vt vix eisde

LXIII
NAVI GAT I O

ratifere sufficeremus posteq aut illic notte vna cu media die petstitimus/inges ad mirabifos pps ab

cuc tacatoe stuporeg ad nos inspiciëdos aduenit

qre seniores nos qeq rogbat vt fecu ad alios eor

pagos (qui logius in terra erat)co mearem us quod

et quide eis anuimus llic dica facile no e eitos ipi

nobis ipedert honores Fuimus aut apud eumitas

eor populatoes/per itegros noue dies eui ipis eun
tes ob quod nobis eq in naubus remaferat retu

leit socn se idecirco pleruga i anxietate timoreg no

minio extirisse Nobis aut bis noue leucis aut circi
ter i eor" terra exstetibus ad nauies nfas repedare

propeluis Et quide nostro in regresiu tam co

piola ex eis viorq ac mulierq multitudo accurtit

qui nos vicq ad mare prosectu iunt vt hoc ipsum

mi rabile forer Commq noha i quempia ex itinere fa

tigatu iri cotingeret ipsi nos sub leuabat & in suis

re tiaculis i quibus dormitat studiokiime subuehe

bant in traniitu quoq fluminu que apud eos pluri

ma iunq & maxima/lie nos cum suis artificiis lecu

re tranmittebät vt nulla vicq pericula perimeles

rimus Plurimi etia eoru nos comitabant renü suau-

ru onusti/quas nobis/dederat illas in re tiaculis illis

quibus dormiuit vectantes pluaria videlicet presti
dia necno arcus multis/fagitalaq multas / ac in fi

nitos diver foru colorum psitacos Alq quoq com-

plures supelleculilem suâ totâ serentes animalia etia
PRIMA

fortunatū le fœlicemœ putabat qui in transmarina
dis aquis nos in collo dorsi vel suo traśuectare pos
terat Quā primū autē ad mare pertigimus & fasēs
los nostros conscendere voluimus in ipso fælorū
nostrōs ascenśū tanta ipsorum nos cōmitantīū et
nobisē ascendere cōcertantīū ac naues nostras vi
dere cōcupiscentīū presūra suit vt nostrī lēm fāe
li pene pre pondere submergērentī/in ipsīs autē no
strīs eīdem fæelis recepimnus ex eīs nobisē quot
quot potuimus ac eos ad naues nostras vīp̄ pers
duximus TANTI etiam illorū per mare natantes &
yna nos cōcomitantes aduenerūt vt tot aduentas
re molestiūscule ferremus cū liquīdē plurefop̄ mil-
le in nostros naues licet nudi & inermes introius;
sent/apparatum artificiūc̄ nostrī necnō & n-auiī
ipsarū magnitudinem mirantes Aśt tunc quiddam
sū dignū accidit Nam cū machinarv/tormentorū
̄ bellicoru nostrōs quedā exonerare cōcupere-
̄ mūs et ppter hoc (imposito igne) machinē ipsē hor
̄ ridīfīme tenuīssent pars illorū maxima( audito hu
̄ fuscemodi tonītruo) sēle in mare natians perciπ-
̄ sanīt veluti soliē sunt rane in ripā sidētes quē fī for
̄ tassīs tumultuosum quitquā audīunt sēle in phun-
̄ dum luti latitaturē iminerğūt /quemadmodum &
gens illa tunc secerunt illīc̄ eorū qui ad naues aū
̄ fugerantē sic tunc pertertī fuerūt vt nostī nōv̄
̄ ftrī nosmet repēnderemus. Verū illos mōx lēc̄
NAVISITIO

...
PRIMA

rum modoru ac coloru pennarucj alitibus fectidl
sunt vt id sit visu enarratuq mirabile regio liquis
dem illa multum amena fructideracq est/liluis ac ne
monibus maximis plena quae omni tempore virét
rie eorum vms folia fluunt. Fructus etiam innu
merabiles & nostris omnino dissimiles habent hee
cine tellus in torrida zona sita est directe sub para
lello qui cancri tropici des cribit vni polus orizons
sis eiusdè se.xxij gradibus elevat in fine climatis se
cundi Nobis aut inibi existentibus nos cotéplatu
populus multus aduenit effigiem albedinem nos
stram mirantes quibus vnde veniremus seiscitanti
bus e coelo inuisidente terre gratia nos descendisse
respondimus quod & vtiep ipsi credebát in hac tel
lure baptisteria fontesug sacros plures instituimus
in quibus eorum infiniti s seipsum baptisari fecerunt
se eorù lingua charaibi hoc est magnè sapientíq vi
ros vocantes Et provinciae ipse Pariaab eipsis nun
cupata est. Postea aut porti illum terramc# deres
linquetes ac secundù collè tranfnavigantes & ter
ram ipseam visu semper sequentes.Dccc.lxx.leucas
a portu illo percurrimus facientes gyros circuitus
intersim multitibis & cum gentibus multit conuer
santes practicantese. Vbi in pleris locis aur.#(ed
no in grandi copia)emimus cum nobis terras illas re
perire & si i eis aur foret tuc sufficeret cognoscere
Et quia tunc.xxij,iam mensibus in navigatione

LXVII
NAVIGATIO

perstiteramus et navalia nostra apparatur et nostris toti penes consumpti erant homines labore perpetuam
et Commonem inter nos de restaurandis naviculis nostris quae aqua vndicé recepta & repetunda
Hispania inuimus cœcordiam in qua dum persiste
remus vnnanimitate propo porti vnum eramus totis
us orbis optimus in quem cum naubes nostris intro
entes: gëtem ibidé infinita inuenimus quæ nos cum
magna suscepit amicicia in terra autè illa naviculâ
vna cum reliquis naviculis nostris ac dolis nouam
fabricuisimus ipsalæc machinas nostras & tormen
ta bellica quæ in aqua vndicé penè peribant in terre
ram suscepimus nostros naues ab eis exoneramus
mus & post hæc in terrâ traximus et refecimus cor
reximus & pénitus reparuimus. In quæ re eiusmod
tem telluris incœle nō paruũ nobis adiuuamen ex
hibuere quinymmo nobis de suis victualibus ex
affectu largiti sponte sua suæ propter quod inibi
per paucã de nostris cœsumplimus quâquidé rem
ingenti pro beneplacito duximus cum factis tenuia
unct teneremus cum quibus Hispâniâm nostram
nō (nifi indicentes) repetere potuimus. In portu
aut illo, xxxvii. diebus persistimus frequentiis ad
populaciones eorüm cum eis euntes vbi singuli nos
bis non paruüm exhibebant honorem. Nōbis aut
portum eundem exire & navigacione nostrâ reflest
ere concupiscentibus conquesti sunt illi gentem

LXVIII
PRIMA

quamda valde seroce & eis infestam existere/qui certo anni tempore per viam maris in ipsam eorum terram per insidias ingressi nunc pditorie/nunc nunc multos eorum interimerent manducarent & deinde.

Alios yro in sua terrae suis domos captivatos ducerent/contra quos ipsi se vix defendere possent nobis insinuantes gentem illam quamda inhabitaret insula quae in mari levis centa aut circiter erat. Qua rem ipsi nobis cu tanto affectu ac querimonia com memorauerit vt eis ex condolentia magna crede remus/pmitteremus vt de tantis eos vindicaremus inimuus/ppter quod illi Ieatantes n6 paru esse eti/sele nobilcum venturos sponte sua propria ob tulerit/quo plures ob causas acceptare recusauimus demptis septem quos data conditione receptus vt soli in suis lintribus i propriaremaret/qui reducendorur eorum cura fuscipere nequaquae intense debamus cui conditioni ipsi a garantere acquieate rur. Etita illos amicos nostros plurimui effectos de relinquetes ab eis abcessimus.Restauratis aut repa ratulis navalibus nostris septe per gyrum maris (venio inter grecu & levante nos ducente) navigauimus dies Post quos plurimis obuiuimus insulis quidem alie habitare alie yro desert erat. Harum igitur vni tandem appropinquates & naues nostras inibi sitere facientes/vidimus ibidem maximum genetis acrius qui insulam illa lty nuncuparent quibus d

LXIX
NAVIGATIO

prospectis & nauiculis phaselis nostris viris valde & machinis tribus stirpatis terrae eodem vicinius appropiatae. C. viros eum mulieribus ejusmodo iuxta littus esse conspeximus qui vt /de prioribus, habitae est omnis nudi meantes/corpus strenuo erat/necnon bellicosi plurimi validi apparebant/cum liquide omnis armis suis arcubus videlicet & sagittios lanceolos armati esset/quotum quadraginta parmas etiam quadratae scuta gerebatur quisque oportune se quenim habet vt eos iaculados sagittis suis in aliquo non impediret. Cumque cum phaselis nostris terrae ipsi essent sagittae volatus appropiassimur omnes citius in mare prulierunt & infinitis emissis sagittas seque contra nos strenuus (ne in terrae descendentes re postemus) defendere occiperent. Omnis vero quos corporibus diversis coloribus depicti & variis volucris penis ornat pro se quos hi qui nobiscum venerat alpiscientes illos ad preliandum paratos esse quotiescuntes si picti aut autum plumis ornati sunt nobis innumeris. Intantum aut introitu terrae nobis impediret vt saxi uomas machinas nostras in eos coacti furent mutum emittere/quo audent audito tumulto impetuquis viso necnon ex eis pleriqui in terrae mortuis decidisse prospectis omnes internae seque reciperent. Tumque facto internos consilio, ex hi de nobis in terrae post eos co corda uimus exilere & adversus eos magno animo

LXX
PRIMA

pugnare quod & quidem fecimus. Nā tu aduersum illos in terram cum armis nostris profiteamur / cōtra cēs illic igitur Nobis opposuerunt vt duabus fere horribus continuā in uicem gesterimus bellī/ pter id ĉ de eis magnā faceremus victoriam demptis eorum præpaui cēs quos ballistarī volubrantīs nostris suis intercesserunt telis quod indecora iūta efectū ĉ quia seipsum a nobis acclāceis ensibus nostrīs subtiliter subtrahēbat. Verūtamen tanta demū in eos incurrimus violentiā vt illos cum gladīs mucronibus nostrīs comīnus attingeremus. Quos quidem cum plausissent omnes in fuga per siluas & nemora conuerunt sunt/ac nos campī victores (interfectīs ex eīs vulneratīs plurīmis) defferuerunt. Hos aūt pro die illa longī/ re fuga nequaquam inequī voluimus/ob id ĉ fatī gatī nimiū tūc esserum quinpotius ad nauem nīras cum tanta septem illorum quæ nostrīcum venerant remeauimus laeticia vt tantum in gaudium vix ipsi sulcipe possent. Sequēptī aūt aductāte die vidimus per insulam ipsam copiolam gentium approximquare catērūam cornibus instrumentīcīs aliis quibus in bellis vtuntūr buccināntem/qui & quos que descripsit omnes ac varīs volucrū plumīs ornā ti erant. Ita vt intueri mirabile foret quibus percepērtēs ex insulae in tertius deliberauimus cōsilīo vt si gens hēc nostrīs inimicitiae pararet/nosmet omōs
NAVIGATIO

in vnū cōgregarmus videremus; mutuo semper ac interim satageremus vt amicos nobis illos effi

teremus /quibus amiciōā nostrā nō recipientibus illos quasi hostes tractaremus/ac quotquot ex eis cōprehendere valaremus seruos nostros ac mancipia perpetua faceremus & tunc armatiores vt po
tuimus circa plagā ipsum i gyrī nos collegimus. Il-
līvero (vt puto prē machinarū nostrārū stupore) nos in terram tunc minime phibuerunt exilere. Ex iuimus igitur in eos in terram quadrifariam diiuisi. Iviij. viri sintguli decurionē suū sequentes / & cū eis longū manuale gessimus bellum. Verūtamen post diuturnam pugnā plurimīcē certamen necnō ins
teremptos ex eis multos/omnes in fugā coegimus & ad vsgō populationē eorum vnam prosecuti suim

mus vbi comprehensīs ex eis. xxv. captuīis eandē eorum populationē ignī cōbusseimus & insuper ad

naues nostras cus ipīs. xxv. captuīis repedauimus interfectis ex eadem gente vulneratīcē plurimīs/
ex mīnis aut interēpto dūtaxat vnos ed vulneratis. xxij. qui oēs ex dei adiutorio sanitate recuperauec-

rūt. Cēterū aut recurfu i patriā p nos deliberato or
dinato cē viri septem illi qui nobīscū illuc venerant quorū quinqō in premīslo bello vulnerati exitterāt phaēlo vno in insula illa arrepto cū captuīs septē (quos illūs tribuīmus) tres videlicet viros & quatu

omulieres in terram suā cū gaudio magno et mae

LXXII
SECVNDA

gna vixi nostrarum admiratione regrefsi sunt. Nonque
hispanie viam sequentes Caliciu tandem repeti
mus portum cum. CC. xxix. captiuratis personis. XV.
Octobris die Anno dni. M. ccccldxxxix. Vbi letissi
me suscepiimus ac vbi eosque captuos nostros
vendidimus. Et hae sunt quae in hac navigatioe nos
stra priore annotatu digniora cospeximus.

De secundarii navigatioe cursum

VANTVM AD SECVNDRIB

navigatioe cursum & ea quae in illa me
moratu digna conspexi / dice in sequen
tibus. Eandem igitur inchoantes navigatioe
num Caliciuni exilium portum Anno dni M. cccc
Ixxxix. Mai die. Quo exitu facto nos cursum no-
strum Campiuiridis ad insulas arripientes necno
ad insularum magnae Canarie visum transabenus-
tes in tantu nauigauimus vt insulis cuidam quae ig-
nis insula dicit applicaremus / vbi facta nobis de li-
gnis & aqua pusione & nauigatione nostra rurs
sum p. Leb ecci vetu incepta est. Post enauigatos
xix. dies terra quaeda noua tandem tenuimus / quam
quidem firma exister e cenliumus cotra illa de qua sa
eta in superiornbus meto est / & quae quidem terra in
zona terrida extra lineam equinocti alem ad parte
Austrintra et supra quae meridionalis polus se v. ex

d iij

LXXIII
NAVIGATIO

attat gradibus extra quodque clima distantiam dem terra a prænominatis insulis vt per Lebeccium ventū costabat leucis. In qua terra dies cum noctibus equales. xxvij. Junij cum sol in cancri tropici est existerè reperimus. Eandem terram aquis ois no submerseam nec non magnis fluminibus pfulam esse juuenimus/que et quidem quem plurimum vis dem et procursa altissima aq arbores habentem monstrabat unde neminem in illa esse tum percepimus. Tum vero constimimus & cladem nostra anchoravimus solutis nonnullis phaselis cu quibus in terram ipsam accedere tentauimus. Porro nos aditum in illum queretes & circu eam septius gyentes ipsum vt pretactum est lic flaminīus vndis vbiç perfulam insuenimus vt nulloc locus esset qui maximis aquis non immadeferet. Vidimus tū interim per fluminis ipsa signa simul quæmod ipsa eadem tellus inabitata esset & incolis multis sedunda. At qin ea de signa consideratur in ipsam descendere nequies bamus ad naues versus reuniri concordauimus quod & quidè fecimus. Quibus ab hinc exanchoratis postea in Leuantē & Seroccū ventū/ collateralit secundū terram (lic spirante vento) nauigauimus pertentantes septius interim pluribus cê.xd. durantibus leucis si in ipsam penetrare insulam valeremus Qui labor ois inanis extitit. Cù luidè illo in late re maris fluxû qui a Serocco ad Magistralè abbat lic violentū copererimus vt idem mare le nauigabi

LXXIV
SECVNDA

le no preberet. Quibus cognitis incovenientibus consilio facto coevenimus vt nauigium nostrum magistre ad Magistrale reflecteremus. Tumque secundum terram ipam intatui nauigauimus vt tandem portui venire applicaremus qui bellissima insulam bellissimi quin quendam in eius ingressu tenebat / supra quae nobis nautigantibus vt in illu introire possemus insulam in insula ipsa genti turbae a mari quatuor leucis aut circiter diuitate vidimus. Cuius rei graeca letatique nolo par est extiminus Igii paratis nauiculis nisi vt in eandem insulam vaderemus linte quae in qua suo complures erant ex alto mari venire vidimus. Appiter quod tunc coevenimus vt eis inuisis ipso commeprehenderemus. Et tunc in illos nauigare in gyrum ne euadere possent circitare occipimus. Quibus sua quoque vice nitenibus vidimus illos (aura temperata manete) remis suis oibus sumo erectis quae si firmos ac resistentes iei significare velles quae re tue idcirco illos efficere putauimus vt inde nos in admirationem couerteret. Cui quo sihi nos cominus appinare cognouissent remis suis i aqua coeurlis ter tara ylvs remigare iceper. Atque nobiscum carbas ina xlv. dolorio volatu celentim educabamus quae tue tali nauigio delata est vt subito ventus fugat eos obtineret. Cumque irrufendi in illos adivenisset commoditas ipsi seque apparatus suis in phasel seu ordinate spargites iei quoque ad nauigandum accinxerit. Itaque cu eos preterissemus iipi fugere conatis fuit. At nos...

LXXV
nōnullis tunc expeditis phaselīs validīs virīs stipatis illos tunc cōprehendere putantès mox in eos in currīmus contra ãs bis gemīnis fere horīs / nobīs nitentibus/nīsi carbasus nostra quē curīs eos prēterierat rūrum super eos rēuerīa suiisset/illos penītus amītebamus. Cum vero ipsīse eiusdem nostrīs phaselīs carbasocq vnd iqconstrictos esse perspice rent oṁs ã circuit. xx. erāt & a terra duabus fere leu cis dištābat/in mare salītus pfilierunt. Quos nos cū phaselīs nostrīs tota plementes die/nullos ex eis nīs tantumodo duos prēhēdere potuimus aliq ois bus in terram saluis ab cuntibus. In lintre autē eorū quam deseruerant bis gemīni iuuenes extabant nō de eorum gente geniti sed quos in tellure aliena ra puerāt/quotī singulis ex recenti vulnere virūlia ab iciderant/quē res admirationē nō paruam nobis aet tulit. Hos autem cū in nostrīs fuscepissemus nauī culas nutibus nobīs insinuārunt quemadmodū illī eos ab ipsīs manducandos abducent/indicantes interīm quod ġēs hēc tā effera & cruelīs/hūnarū carnīū comestrix Cambali nūcuparet. Postea aut nos ipsām eorū lintrem nobiscum trahentes/â cū nauiculis nostrīs curīs eorū terrā verfus arripien tes paruōper interīm cōstitimus & nauōes nīras me diā tantiō leuca a plaga illa dištātes anchore ausemūs/ quam cū populi plurīmū oberrare vidissēmus in illam cum ipsīs nauiculis nostrīs subīto propereaui-
SECUNDA

mus ductis nobiscum duobus illis quos in lintre a nobis inuasa cōprehenderamus. Quā primū autē terram ipsam pede contigimus omnes trempi & se ipsos abdituri in vicinas nemorū latebras diffugē
runt. Tum vero vno ex illis quos prehenderamus abire permisso & plurimis illi amicitā signis necnō nolīs cymbalis / ac speculis pleriscā datis/dī
ximus ei ne ppter nos ceteri qui auffsugerant expas uelcerent/qm eorū amicos esse plurimum cupieba
mus/qui abiens iussa nostra soletterimpleuit genus te illa tota .ccc .videlicet fere viris/cum fāminis
multis a siluis secul ad nos educēs. Quī inermes ad nos vbi cum nauculis nostris eramus omnes vene
runt/ & cū quibus tūc amiciam bonā firmāvimus restituto quoēs eis alio quem captiūī tenebamus & pariter eorum lintrem quam inuaseramus p nas
uiū nostrarū socios apud quos erat eis restitui man dausimus. Porro hēc eorū linter quē ex solo arboris
trunco cauata & multū subtiliter effecta fuerat/loś
ga .xxvi .passibus et lata duobus brachiēs erat. Hāc
cū a nobis recuperassent & tuto i loco fluminis re posuissent omēs a nobis repente fugerunt nec nobi
scum amplius convenerant voluerunt. Quō tam bar
baro facto comperto illos malē fidei malēs condi-
tionēs existere coguouimus. Apud eos aūē duē
xat pauculū quod ex aūibus gestabant vidimus. Itāē plaga illa relictā & secundum eam nauigāris/

LXXVII
NAVIGATIO

LXXX. circiter leucis statione quando nauiculis tuta reperimus/ in quam introcutes tantas ini bi coperimus mus getes vt id mirabile foret. Cui quibus facta amicula vi mus deinde cu eis ad plures eorum pagos vbi mitu securum mitu honeste ab eis suscepi sumus & ab eis iterim. Cenica noilam emimus cum auro modico quod eis ex gratia cotulumus. In hac terra vini ex fructibus semetibus expressum vt ciceram ceruissiamue albam et rubente bibit/meius aut ex myrre pomis valde bonis cirsedtu erat ex quibus cum multis ebonis aliis fructibus gustui lapidis & corpori saubribus habu danter comedimus/ppterea optepiustium illuc adueneramus. Hegae adhinsula eorum rebus supplcedtilium qu multi hanc hundan est/gens spela bone couterationis & maioris pacificetie est eis vtc alibi repererimus alia. In hoc portu.xvii.diebus cui ingenti placito perstitimus venietibus quotidie ad nos populis mitis nos effigiemus nostra & albedinem neco vestimenta arma nostra & nauius nostrarum magnitudine ads mirantibus. Hij etiam nobis gente quando eis inse sitatem occidentem illius existere retulerunt/quae gens infinita habebant vnionum quantitate/quat quos ipsi habebant vniones eisdem inimicis suis in belligerantibus aduerantius eos habitus abstulerat nos quos & quaedammodi illos pilarent & quaedammodi nasscentes edocentes, quorum dicitat vera psesto esse co
SECVNDA

gnouimus put et maiestas viæ posthec amplius in
telligere poterit. Relicto aút portu illo & secundû
plagæ eandæ in qua cõtinue gentes affluere spicie
bamus curfu nostro pducio portû quendiã aliûres
ficiæde vnius nauiculære nostræ gra/in quo gête mul-
tâ esse cõperimus/cû quibus nec vi nec amicicia co-
terlatione obtinere valuimus/iîlis fî qnâ in terrâ
cû nauiculis nostris descendemus se côtra asperê
defendentibus/ & fî qnâ nos sustinere nó valorê
in siluas auxugientibus/ & nos nequaç expectanti
bus/quor tantâ barbarie nos cognoscentes ab eis
exhinc discessimus. Tuncè inter nauigandû insulâ
quandã in mari leucis a terra.xv. distantê vidimus
quam fî in ea populus quispiã esset inuisere cucor-
daûimus. In iillum igit accelerantes quandã inibi in/
uenimus gentem/que oîm bestialissima simplicissî-
mac/ omniu quoç gratiosissima benignissimaç
erat/quiulquidê gentis ritus et mores eiûsmodi fût.
De eiûsdem gentis ritu & moribus.

II VVLTV AC GESTV CORPO
ris brutales admodum'extant/ singulîç
maxillas herba quadã viridi îîroîum res-
pletas habebeât/quâ pecudum inûar vîç rumina-
bant/ita vt vix quicçè eloqui possent/quorî quoç
èç singulì ex collo pusillas fícataçç cucurbitas du-
as/alteram earum herba ipsa quam in ore tenebât/
alteram vero ex ipsis farina quadam albida gîplo

LXXIX
NAVIGATIO

mutuo simili plenam gerebant/habito bacillo quo
dam quae in ore suo madefacta maasticatum sepsi-
us in cucurbitam farrina repleta mittebant/ & dein
de cum eo de eadem farrina extrahebatur/ quam sibi
post hunc in ore virtuose ponebant/herbam ipsam
qua in ore gestabat eadem farrina respertitada/ &
hoc frequentissime paulatim efficiebatur/qua rem
nos admirati/illius causam secretum aut cur ita fas-
ceret latis nequius coprhedere/ Heccine gens
(vt experimento didicimus) ad nos adeo familiaris-
ter aduenit/ ac si nobis epius antea negotiati fuis
issent & longeuam amiciciam habuissent. Nobis autem
per plagam ipsum cui eis ambulantibus colloquen-
tibus & interim recentem aquam bibere delides
antibus/ipsi per signa se talibus aquas penitus cas-
rere insinuantes vitro de herba farinae quam in
ore gestabant offerebant/propter quod regionem
candem aquas deficientem & quasvt sum lubre s
uarent suam herbam farinam talem in ore gestas-
tet intelleximus. Vnde factum est ut nobis ita mes-
antibus & circum plagam eandem vna die cum mes-
dia illos cocomitantibus viuidam aquam nulgo in
uenerimus/cognouerimus & ea quam bibebant
aqua ex rore nocturno super certis foliis auriculis atini
similibus decidete collecta erat. Quoquidem folia
eiusmodi rore nocturno tpe se implebat ex q rore
(qui optius e) idem pps bibebat/ sed ttn talibus foliis

LXXX
SECVNDA

plerà òc eorũ loca desiciebant. Heccine gens vicenus alibus quæ in terra solida sunt penitus carent quin ymmo ex piscibus quos in mari piscantur viuunt. Etenim apud eos qui magni piscatores existunt piscium ingens habundat copia ex quibus ipsi pluri mos tortures ac òb bonos pisces alios plures vitro nobis obtulerunt. Eorum vxores herba quain ore viri ipsi gerebant nuls vtebantur. Verum singule cucurbitam vnam aqua impletam ex qua biberent habebant. Nullo domorum pagos nulla ve tuga ria gens hæc habent preterea folia grandia quedam sub quibus a solis feroore sed nõ ab ymbribus se p tegunt propter quod autumabile est ò parum in terra illa pluitet. Cum autem ad piscandum mare adie rint folium vnum adeo grande secum quisque piscatu rus effert vtillo in terram defixo & ad solis meas tum verlato sub illius vmbra aedium est totum se abscondat. Haccine in insula òmulta varios gene rern animalia sunt quæ omnia aquam lutilentã bibit. Videntes aut ò in ea comedicil nihil nancisc et remur nos relicta illa alia quamda insula tenuimus in quam nos ingredientes & recentem vnde bibe remus aquã inuestigantes putantes interim ipsam eandem terrã a nullis esse habitatam propter ea quã in ea nemine inter adueniendum pisceramus dum per arenâ deambularemus vestigia pedum òmae gna nonnulla vidimus ex quibus celiimus ò li eila

LXXXI
dem pedibus reliqua membra respondebant; hos
mines in eadem terra grandissimi habitabant. Nos
bis aut ita per arenam deambulantibus/via vnam
in terram ducente cóperimus secundum quam.ix.
de nobis éutes insulam ipsam inuillere paraúimus
ob id ϕ non ϕ spacio sam illam nec ϕ multas in ea
habitare gentes existimauimus. Pererrata igitur se
cundu eamdem viam vna fere leuca quinç in con
valle quadam (que popolatis apparebant) vidimus
casas/in quas introeuntes quinç in illis reperimus
mulieres/vetulas videli cet duas & iuuenculas tres
quæ quidem oús sic statura, pceres erat vt inde val
de miraremur. He aut protinus vt nos intuite sunt
adeo stupefacTe permanerut vt aufragendi animo
penitus deficerent. Tumç vetule ipse lingua eorū
nobiscum blandiuscule loquentes et sefe omnes in
calam vnam recipiētes quam multa nobis de suis victu
alibus obtulerunt Eedem ϕ oús longissimo viro
statura grandiores erant & quide εque grandes vt
Franciscus de Albicio/fed meliore ϕ nos sumus ϕ
portioe compacte. Quibus ita compertis posthēc
vna cóvenimus/vt iuueculis ipsis per vim arreptis
eas in Castiliam quasi re admirādā abduceremus/
in qua deliberatioe nobis existentibus ecce.xxxvi.
vel circiter vini mikroϕ fémine ipsë altiores/ & adeo
gregie cópoliti/vt illos inspicere delectabile foret
calam ipsam introire oceperūt/ ppter quos tanta
SECVNDA

tūc asectī fuimus turbatiōe vt latius apūd nauicu
las nīnas ēō tali gente esse duxiissemus. Hīj & em
ingentes arcus & sagittas necnon & ludes ptica
ue magnas. instār clauarūā ferebant/qui ingressi loc
quebantur quōcē inter se mutuo ac si nos compe
hendere vellēt. Quo tali périculo percepserimus diuer
etia iter nos tūc fecimus cōsilia. Nīs vt illos ipsec
eadē cāsa inuaderemus/aliis yō nequaē lēd foris
potius & i platea/aliis vt nūscē aduersus eōs pu
gnām quereremus donec quid agere vellēt itellige
remus assuerantibus. Inter quē cōsilia calam illā si
mulatē exiuimus & ad naues nīnas remcare occēpi
mus ipsecē (ēōtus est lapidis iactus) mutuo lēp loquē
tes nos insecuti sunt/haud minore ēō nos vt autus
mo trepidantes formidine/cū nobis mirantibus ipi
quōcē eminus manerent/ś nosi nobis ambulantibus
bus nō ambulantent. Ĉū yō ad naues nostra perti
giisemus & in illas ex ordine ētōiremus/mox oēs
in mare profilierunt/ś ēm multas post nos sagittas
suas iaculati sunt/śd tūc eos ppaucē metuēbamus
Nam tum machinarū nīrū duās in eōs (potius vt
termēt ēō vt ētētēt) emilīmus/quaūquidē tumul
tu ņeptō/oēs cōfēsim mōte vnū, ppīquēē fuga
abieēt/et āt ab eis ereptī fuimus discellīmusōpē
Hīj oēs nūdī vt de poribus hītū ē eunt. Appellauis
musē ēsilē illā/gigātū (ob peeritate eor) ēsilē. No
bis àtvltēs et a ēa paulo dištātīus tràfremiātibus

LXXXIII
NAVIGATIO

SECVNDA


De tertio facta navigacione

LXXXV
NAVIGATIO

E IN SIBILLIA]EXISTENTE/ ET

a pœnis atque laboribus quos iter òmemo
ratas pertulerà navigationes paulisper re
quiescet/etdesideratet posthec in perlan terram
remeare: fortuna fatigationum mea nequaë adhuc
satura serenissimo illi dìo Manuei Portugalìg Re
gi misit in cor(nescio vt quid) vt destinato nuncio
litteras regales suas ad me tràsmitteret quibus plus
rimù rogabat vt ad eì apud Lisbonâ celerius me
transferré/i et òtem mirabilia mihi plurima faceret:
Super qua re nondù tunce deliberaui quinquemmo ei
per eundemmet nuncìë/me minus bene diposìti
& tune male habere significai.Vcrì si quandoct
reòualecserë & maiestati eius regis meum forsan
tóplaceret obsequiì omnia queìcùì vellet ex ani
mo perficerë. Qui rex percipies qì me ad se tùc tra
ducere nequirìiulianì Bartholomeì locundì qui
tunc in Lisbona erat rursum ad me destinavit cum
còmissione vt oìbus modis me ad eundë regë secù
perucerer; òptìr cuius iulianì aduentìì et preces/
coactus tùc sui ad regë iìpsum meare/ quod(qui me
nouerant omnes) malù esse iudicarunt. Et ita a Cas-
stilia vbi honor mihi non modicus exhibitus extis-
terat/ac rex ipse Castilië. existimationë de me bos-
nam conceperat profectus sum/ & quod deterius
fuit hospite insalutato/ac mox coram ipsò regë de
mino Manuele meíplum obtuli: qui rex de aduen-
TERTIA

tu meo non parum visus est concepisse ut etiam plurimum me interdum rogitanus ut una cum tribus eius conservantique nauibus/que ad exeundum & ad nouarum terrarum inquisitione preparate erant proficiendi vellem. Et ita quia regum preces precepta sunt ad eius votum consensu.

Tempus profectionis tertig

igitur ab hoc LISBONE PORTV
eum tribus conservantium nauibus die Mai decem MCCC.& primo abeuntes cursum nostrum versum magne Canarie insulas arripuimus: secundum quas & ad earum prospecti instanter nauigates idem nauigius nostrum collateraliiter secundum Africum occidentem plus secuti suimus. Vbi piscit quos tandem (quos Parghi nuncupant)multitudinem maximum in equore prendidimus/tribus inibi diebus mortem facientes. Exinde autem ad partem illam Ethiopique/que Belulieca dicit devenimus/que quide sub torrida zona posita est & super quam. xiiii gradibus in Septemtrionalis erigit polus in climatis primo vbi diebus. xi. nobis de lignis & aquis provisione parantes restitimus &pter id Quo Austrius sus p Atlanticu pelagus nauigandi mihi ineslet affectus. Ita portu Ethiopique illu post hcec relinquuen eij

LXXXVII
NAVIGATIO

tes tunec per Lebeccii venit in tantu nauigauimus vt. lx. et. vii. infra dies insulæ cuidam applicuerimus quæ insula DCC. a portu eodem leucis ad Lebeccij parte distaret. In quibus qnidie diebus/ peius tcepis fuimus çi vnçi in mari quidç antea pertus lerit/ ppi ventorù nimborùue impetus/ qu¿ qpluus rima nobis intulere grauamina ex eo çp nauigium nostrù lineç presertiim equinoctiali cûtine inter eutù fuit. Inibieç in mense lunio hyems exstat ac dies nos eetibus equales sunt/areç rple vmbre nçç continue versus meridiem erant. Tandem vero omnitonan ci placuit noua vnam nobis ostendere plagà. xvi. scilicet Augusti/iuxta quam(leuca sepòriti ab cæd um media)restitimus/et postea auspctis cyrbis nònullis in ipsa visas òi inhabita effet, psecti fuìs mus; quam çq quidâ incolas plurimos habitare re perimus qui bestiis prauiores erat/ quæadmodum maiestas regia vestra posthæc intelliçet. In hoc yó introitus nostri principio gentem non percipimus aliquâ/çquis oram rplam per signa plurima( quæ vi dimus) populo molto repletâ esse intellecxerimus. De qua quidâ ora prop. lillo serenissimo Castilic re ge possessoriç cçpimus/iuuenimusçç illa multum amœnà/ac veridç esse çç apparentìç bong. Est aus tè extra lineam equinoctialem Austrun versus v. gradibus/et ita eadem die ad naves nostras repeda timus. Quia vero lignorum çq aque peuuuriam pa

LXXXVIII
TERTIA

tiebamur / concordauimus iterū in terrā alsera dīe
reverti vt nobis de necessāriis quidēremus: inqua
quidem nobis extantibus/v idimus hantae in vni
us montis cacumine gentes quæ deorīm descend
te non auerent/ erantque nudi omnes nec non con
tī milis effigiei colorisct vt de supionibus habitū est.
Nobis aut satagentibus vt nobiscū conversatū aco
cederet/ nō sic securos eos efficere valuimus vt de
nobis ad hue nō dissiderent. Quorū obstinatioe p
teruiaq cognita/ad naues sub noctē remeauiimus
relictis in terra(videntibus illis)nolis speculisci nō
nullis ac rebus aliis. Cūc nos in mari eminuī esse
prospicerēt/oĩms de ipso mōte(ppter reculas quas
reliqueramus) descendunt plurima inter se admi
tationis signa facientes. Nectunc de aliquo nisi de
aqua nobis quidādimus. Cæstino autē effecto manē
vidimus e nauibus gentem eandem numero ĕp an
tea māterē passim per terram ignes sumos etfacie
stem. Vnde nos exstitantes ĕp nos per hoc ad se in
uitarent iuimus ad eos in terram/vbi tunc populu
plurīmī aduenisse cōspeximus: qui tamen a nobis
longe seipsum tenebant/signa facientes interim nō
nulla vt cum eis interius in insula vaderemus. Pro
pter quod factū est vt ex Christicoli nris duo pe
tinus ad hoc parati periculo ad tales eundi semet
seipsum exponerent/vt quales gentes eedem forent/
aut si quas diuitias specieiue aromaticas villas habe

LXXXIX
NAVIGATIO

rent/ipsi cognoscere: quapropter in tantum nauem pretorem rogatae sunt/vt eis quod postulabat an
nueret. Tum vero illi ad hoc sele accingentes necnon plerasc de rebus suis minutas fecundum sumentes/vt in
de a gentibus eisdem mercaret' alias/abierunt a nos
bis data conditione/vt ad nos post quincus dies ad
summin remare solicius esset / nos etenim illos tam
diu spectaremus. Et ita tuiter suum in terrarum arri
puerunt/ atque nos ad naues nostras regressum ces-
pimus vbi expectando eos diebus. vi. undem, persequi s
mus. In quibus diebus gens per multa noua dietim
fere ad plagam ipsam adueniebat / sed nunc nobiscum
colloqui voluerunt Septima igitur aduentare die nos
in terram ipsum iterum tendentes/gentem illam mulies
tes suas omnes fecundum adduxisse reperimus. Qua vo
primus illum peruenimus/mox ex eisdem uxoribus
suis ad colloquendum nobiscum eplures miserunt/ sem-
minis tamen eisdem non satis de nobis conscientius
bus: quod quidem nos attendentes coci cordauimus
vt iuuemem vnum e nobis (qui validus agilis hic
mium esset) ad eas quoci transmitteremus/ & tum
tminus faming eodem metueret in naviculas nos-
stras introiuius. Quo egresso iuuene cibi seipsum
inter illas immiscissit/ac ille omnes circumstantes
contingere palparent & eum & propter eum no
parum admirarentur: ecce interea de monte famin
na vina vallum magni manu gestans aduenit quae

xc
TERTIA

post saepe vacat simulacrum nostrum frumentum et a tergo percussit quia subito mortuos in terram excideret: quia confestum mulieres aliae corripientes illi in monte a pedibus preseruit viri a qui in monte erat ad littus cum arcubus et sagittis aduenientes et sagittas suas nos cocietis tali gete nostra astecetit stupore ob id quia navicula illi quia bus erat harenanauigando radegit nec celeri aut fugere tunc poterant vtrumendorum armorum sum tum memoriam nemo tunc haberet. Et ita ceteraque cetera nos sagittas suas eiaculabantur. Tum vero in eos quatuor machinarum nostrarum fulmina licet neminem attinget tiam emisimus quo audito no nitro omnem tumultum in monte fugebant vbi mulieres ipsa erat quia iuuenis nostrum quem trucidaverant nobis videntibus in fructa secabat necnus fructa ipsa nobis ostentantes ad ingentem quem succenderant ignem torrebant et deinde posthae manducabat. Viri quoque ipsi signa nobis simuliter facientes geminos Christicolas nostros alios se pariformiter peremisse manducasset insinuabant quibus qui et victis vera loquebantur in hoc ipso credidimus. Cuius nos improprii vehementius puguit cum inmanitatem quem in mortuam exercerunt oculis intueremur ipsi propeus. Quam ob rem plures e quadraginta de nobis in animo stabiliueramus vt omnes pariter terram ipsam impetu
NAVIGATIO

petentes tam immane factū tamĘ bestialēm fero/ 
itā vindicatū vaderemus. Sed hoc ipsis nō 
iprētor nō permīlit/ & ita tam magnum ac tam gra 
lium iniuriā passi cū māliuolo animo & grandis op/ 
probrio nostrō efficiente hoc nauiprēceptore aīro) 
impunitis īllis abcessimus. Postcī αὐt terram 
reliquimus/mox īter Leuantē et Seroccū ventum 
(fecūdū quos le cōtinet terra) nauigare occēpimus 
plurimos ambitus plurimōsōs gyros interdum sē 
ēntantes/quibus durātibus gentes nō vidimus quē 
nobiscū practicare aut ad nos appropinquare vos 
huerint. In tantū yō nauigauimus vt tellurem vnā 
nouā (que secundū Lebeccū se porrigeret) inuene 
rimus. In qua cū campū vnū cūrcuiuislemus(cui san 
eti Vincentij campo nomen indidimus) secundum 
Lebeccū ventū posthec nauigare occēpimus. Dis 
fatā cīdem sancti Vincentij campus a priore terra 
illa vbi Cristicole nostro extitēt interempti, cl. leu 
eis ad partem Leuatīs. Qui et quide canipus ‘vīj, 
gradiibus extra linear ēquinoctialem versus au 
strum est. Cum īgit īta vagantes ēremus/quadā die 
copiosam gentiū multitūdinem/nos nauīumquē 
strarum vaśtitate mirantiū in terra vnā alia esse ēō 
speāimus: apud quos tūtō in loco mox restitimus 
& deinde in terram ipsum ad eos ex nauiculis nos 
stris descendimus/quos quidem mitioris esse cons 
ditionis cī priores reperimus. Nam &si in edomā
TERTIA

dis illis diu elaborauimus/amicos tamé nostros cos
tandem essercimus:cum quibus negociando praetis-
candoç varie.v.|manémus diebus vbi causas listus
las virides plurimù grossas/ & etiam nonullas in ar
borù cacuminibus liccas inuenimus. Concordatum
mus aút vt ex eadem gente duós qui nos eorù ling-
guam edocerent inde traduceremus. Quamobrem
tres ex eis vt in Portugallía venirent nos vitro co
mitati sunt. Et qin me omnia prosequi ac describer
se piget/dignetur vestra nosle maiestas ip nos por
tum illum linquentes/per Lebecciu ventu/ & in vi
su terrelemper transcurrimus plures contine facis-
endo scalas plures æmbitus/ac interdù cu multis
populis loquendo:donec tandemversus Austuum
extra Capicorini tropicù fuimus .Vbi sup hòrizon
ta illù meridionalis polus.xxxiij. se le extollebat gra
dibus / atç minimem iam perdideramus vrlam/ipa
ç maiù vrla multù infima videbæt fere in fine Hor
zontis se ostentans / & tuc per stellas alterius me
ridionalis poli nosmetiplos dirigebamus /quç mul
to plures mtoç maiores ac lucidiores ç nosnì po
li stellë exinstut:propter quod plurímarù illarù figu
ras confinxi / & presertim earù quç prioris ac maio
ris magnitudinis erant/vna cu declinatione diamet
rorù quas circa polum Austri essciunt/ & vna cu
denotatione earudem diametorum & semidiametorù
rorù earum proct in meis quatuor dictis sine naui

xciıı́
NAVIS

gationibus inspici facile poterit. Hocci ne navis gi

icio nostro a campo sancti Augustini incepto. Dec.

percurremus leucas videlicet yfsus ponentem e.
et

verbus Lebecii. De. quasquid dù peragraremus li

quisque vidimus enumerare vellet non totidem et

papirec cartè sufficerent. Nec quidem interdum

magni còmodi res inuenimus demptis infinitis cae

fic arbóribus: et pariter plurímis que laminas cer

 tas producunt et quibus & miranda alia per multa

vidimus que faetídiola reccìtfo forent. Et in hac

quidem peragratìoe. x. fere mensíbus extitimus. In

qua cognito quì mineralia nullù reperiebamus/con

uenimus vna vt ab inde surgètes alio p mare euas
garcirur. Quo inito iter nos consilio mox edictù

fuit ac in omnem cetù nostrù vulgatu vt quicquid

in tali navigatione precipiendù cenferem idíplum

stegeviter fieret. Propter quod còfestim edixì māda

vici vt de lignis & aqua p sex mensíbus mu

nitione omnes libi pararent. Nam per nauíù ma

gistros nos cum nauibus nostris adhuc tantùdem

navigare possè indicatur est quaquidem (quam edi

xeram) facta provisione nos oram illà línquètes &

inde navigauoné nostram per Seroccù ventù initi

antes Februaìij. xiiij. videlicet/cum sol equinoctio

iam appropinquaret et ad hoc Septentrionis hemi

feriù nostrù ygeret in tantù peruagati fuimus ve
eridianù polù super horizonta illù, lij. gradibus

xciv
TERTIA

Sublimatis inuenerimus. Ita vt nec minoris viris nec
maioris stellae ammodo inspici valentem. Nam tu
a portu illo a quo per Serocccum abieramus 
leucis longe iam facti eramus. Nihil videlicet Aprilis:
Qua die tempestas ac procella in mari tam vehem
mens exorta est vt vela nostra omnia colligere &
cum solo nudo & malo remigare copuleremur per
flante vehementissime Lebeccio ac mari intumesc
cente & aere turbulentissimo extante. Propter quod
turbinis violentissimis impetum nostrates omnes
non modico affecti fuerunt stupore. Noctes quos
qui tunc inibi & maxime erant. Etem Aprilis. vij. 
le circa arietis finem extante ipsae eodem no
tarum. xv. esse repertae sunt: hyems qui tunc inibi
erat vt vestra fatis perpædere potest maiestas. No
bis autem sub hac nauigibus turbulentis terram
vnam Aprilis. iij. vidimus penes quam. xx. circiter
leucas nauigantes appropriae. 

Verum illam omnino modo brutallem & extraneam esse copemimus
in quaquadem nec portu quempiam nec gentes ali
quas fore cespeximus: ob id (vt arbitror) est 
rum in ea frigus algeret vt tam acerbum vix quis
qua perpeti posset. Porro in tanto periculo in tans
reps tempestatis importunitate nosmet tum repeti
mus vt vix alteri alteros praegrandi turbine nos vi
deremus. Quamobrem demum cum nauium praes
ore pariter concordauimus vt connauitis nostris

xcv
NAVIGATIO

omnibus terram illâ lincuendi secul ab ea elongan
di /& in Portugalliam remeandi signa faceremus
Quod coâlius canus quidem etvtile suit/cum si inibi
nocte solu adhuc illa perstitissimus dispersiti omis
eramus.Nempe cù hinc abijissimus tâ grandis die
seuenti tempestas in mari excitata est/et penitus
obrui perdite metueremus.Propter quod plurima
peregrinationu vota recnon alias £plures cerimo
nias (prout nautis mas esse soler) tunc facimus.Sub
quo tempestatis isfortunio v. nauigaimus diebus
demissis omnino velis.In quibus quidem v. diebus
et. in mari penetrauimus leucas lineg interim
equinoctiali necnò mari & aurë temperatorii lemsi
per appropinquando/per quod nos a premislis eri
pere periculis altissimo deo placuit.Erat ë huiusce
modi nostra navigatio ad transmontanu ventu &
greci/ob id çp ad Ethiopia latus pertingere cupie
bamus:a quo è maris Athlantiæ fauces eundo Mi:
cce. distabamus leucis. Ad illa aut per sumimitonan
tis gratiam Maj hisquina pertigimus die. Vbi in
plaga vna ad latus Austri (que Serraliona dicitur)
xv. diebus nosipsos restringerano suimus. Et post
hie cursum nostrum venus insulas Lyazori dictas
arripuimus/quiicdiz insule à Serraliona ipa. Dec.
&. l. leucis distabant/ ad quas sub Iulâ finem per
uenimus/ & pariter. xv. inibi nos reficiendo perfit
amus diebus.Post quos inde exituimus & ad Libi

xcvi
OVARTA

bonę nostre recursum nos accinximus/a qua ad ec
cidentis partem, ecc. recepti leucis eramus/et cuius
tandem deinde portum. M.D. iij. cui prospera salua-
tione ex cunctipotentis nutu rursum subiuimus/cui
duabus dumtaxat nauibus: ob id quæ tertiæ in Serra-
liona quam amplius navigare nō posset ignis com-
busseramus. In hac autē nostra tertio curta naviga-
tione. xvi. circiter menses permanimus/e quibus. xii;
abscq transmontante stellæ necnon & maioris vtrq;
minorisque aspectu navigauimus/quo tempore nost
metiplos per aliam meridionalis poli stellam reges
bamus. Quæ superioris commemorata sunt/in eas
dem nostra tertio facta navigazione relatu magis
digna conspexi.

De quartæ navigacionis cursu

ELIQVVM AVTEM EST /VT

que in tertia navigacione nostra prospes
xctim edissera. Quia yq iā prē longa nar-
ratione satīsco/et quocq; hēc eadem nostra naviga-
tio ad speratum a nobis sine minime producta est/ob
aduersitatem infortuniiue quoddam quod in
maris Atlantici nobis accidit inu: idcirco breuior
fiam. Ignit ex Lisbone portu cum sex cōleruantiq
nauibus exiuimus cu proposito insulam vnam ver-
sus horizontem positam inuisendi/que Melcha di
f iij

CVII
citur & diuitiarum multarum famosa necnon nauium omniu siue a Gangetic, siue ab indico mari venis
entium receptus siue statio est/quamadmodum Car
licia receptus siue hospitale omniu nauigantius est
qui ab oriente in occidentem & ecnonuerfo vagantur
prout de hoc ipso per Calicuti viam fama est. Qua
quidem insula Melcha plus ad occidentem Calicuti
b ipse plus ad meridiem respicit: quod idecirco co
gnouimus quia ipsa in aspactu xxxiiij. gradus poli
antarctici sita est. Decima ergo Maii die. M. D. iij:
nobis unde supra egredientibus cursum nostrum ad
insulas virides nuncupatas primo dixerimus. Vbi
rerum necessitarum munimina necnon et plura dis
uellerii modorum refrigeramina sumentes et xij. in
terdum inibi diebus cessantes per ventum Seroci
post hoc euangare occupimus: cù nauidominus no
ster tamè prsumptuosus capitulosque præter necel
sitatem & omniu nostrum vnanimitatem sed solu
vt sele nostri & sex nauii prepositu ostentaret iuf
sit ut in Serraliona Australem Ethiopi terram ten
deremus. Ad quà nobis accelerantibus & illà tan
dem in cóspectu habentibus tam immanis & acere
da suborta tempestas est/ac ventus contrarius &
fortunae aduersa inualuit/ut in ibram quam nosfris
ipsi videbamus oculis per quantiduum applicare
non valudrimus: quinymmo coacti fuerimus ut illa
relicta ad priorum navigazione nostrum regredere

xcviii
QUARTA

Quamquidem nos per Suduefium (qui venustus est inter meridiem et Lebeciū) reasflumentes ecc. per illam maris artitudinē nauigavimus leuca. Vnde factū est vt nobis extra lineam equinoctialem tribus pene gradibus iam tunc existentibus terraquead(a qua. xij. distabamus leucis) apparuit. Quæ apparitio nó parua nos affecit admiratione. Terra etem illa insula in medio mari multū alta et admirabilis erat/que leucis duabus longior & vna dilatatio nocessebat: in qua quidem terra nūqua quicq hominū aut fuerat aut habitauerat/ & nihil minus nobis infelicissima fuit. In illa cēnī p. stolidū consiliū suum & regimen praefectus nauium nosters naucem suā perdidit. Nempē illa a scopulo quodam elīsā/ & inde, ppter hoc in rimas diuīs sanctī Laustrī nocte (quæ Augusti. x. est) in mari penitus submerṣa extitit/nihil inde salvo manente demptis tantūmodo nauitis. Eratē pauum eadem dolorū. ecc. in qua nostrē totius turbe totalis potentia erat. Cum aut omnes circa illam fatageremus vt si forte ipam a periculo subtrahere valeremus; dedit mihi in man datīs idem nauium praefectus, vt cū nauicula vna in receptū quempiam bonū vbi pupes nostras secure omnes recipere possemus apud insulam candē insuentū pergerē/nolens tamen ipse idem praefectus vt nauem meā (quæ nouem nauitis meīs stipata/ & in nauis periclitantis adiutorio intētā furent) mecum f uīj

xcix
NAVIGATIO

funct traducere sed solvi ut edixerat portum unum in /et in illo nauem mea ipsam mihi restitutum. Qua iussione recepta ego ut madauerat (super mecum nautarum meorum meditata) in insula ipam (a qua ueste distabamus leucis) properans pulcherri/num inibi portum in quibus classem nostram omnem tute fas/sis sustinere possumus inueni. Quo cōperto viri: ibidem diebus undī nauem prefecerat cum reliqua turba expectādo persimul. Qui cum non adueiret molestē non per um pertuli atque qui mecum erant sic observabant ut nullo consolari modo vellent. No bis aut in hae existentibus angustia ipsa octaua die /puppim unam per equor audentare colpeximus cui /vt nos percipere possent mox obiunam iuimus con/fidentes sperātes cum qua quod ad meliora portus quique /piam nos secum duceret. Quibus du approquinuār/semus & vicissim nos relatiissemus: retulerunt illi/nobis eiusdem prefectori Miniatius in mari penitus (de/ptis nautis) putātā exitisse: quae nūcia (vt hōc plēr/iā port regia maiestas) me non paraua afectā: mole/stä eum a Lisbona (ad qua reverteri habebā). M. longe existedent leucis in longo remotocum mari me esse sentirem. Nihilo minus tamen forte ung nosmet subiircis/entes vitientes pecūsimus/reuerātei et primus suiun ad memoratā insulae quibus nobis de lignis & ueste /peruerātiū meg nauem diximus: Erat x o eadē ilula pen/nius inhospitata in habitatae mita aqua vāuida &
QUARTA

suam in illa secturiente/cum infinitis arboribus in
numeris quibus volucribus marinis & terrestribus/quæ
addeo simplices erant vt seh manu comprehender
intrepidam permittent.Propter quod tot tūc pren
didimus vt naviculæ vnam ex illis adimpleuerimus
In ea autē nulla alia inuenuimus animalia pterças mu
res ejusmaximos/et lacertas bifurcam caudam habē
res cum nonullis serpentibus quos eiam in ea vidi
mus.Igitur parata nobis initiptriuiione sub vennt
n so inter meridiem & Lebectiū ducete perreximus
ob id q a rege mandatu accperamus /vt qualicum
q non obstante periculo præcedentis navigationis
viam in sequeremur.Incepto ergo huiuscemodi na
vigio portum tandem vnum inuenuimus quæ omn
nium sanctorum Abbaciam nuncupauimus/ad quem
(prosperam annuente nobis auram altissimo)infra
xvii.pertigitimus dies.Disti eis idem portus ecc.a p
fata insula leucis/in quoquidē portu nec prefedum
nostrū nec quemquam de turba alium perperimus/et
si tamē in illo mensibus duobus & diebus quatuor
expectauerimus/quetibus efluxis vifo q illuc nemeno
veniet et conferuantia nostra tune & ego cōcordami
mus /vt seculū latus longius progresseremur.Per
curias itaque.cc.lx.leucis portu cūdam alīn appicui
mus in quo castellum vnum erigere propoelius quod & quidē,psecto fěcimus reliqvis in illo.xxiiīq.
Christiculis nobiscum existentibus/qui ex președ̄i
NAVIGATIO

QUARTA

ce mutu & ut lira quis sit credible festiue susceputi suis
mus: ob id quae ipfa tota civitas nos in mari dispersi
tos esse existimabat quodam modo reliquir omnes de
curba nostra plebe orni nauim statua presumptio
ne extiterat. Quo superbia modo iustus omnium esse
for deus compensat. Et ita nunc apud Lisbonam
substituit ignorant quid de me serenissimus ipse rex
deinceps efficere cogit et quanta laboribus meis
iam exnunc requiescere plurimis beneficis peroptarem
huc nuncius maiestatis vestiae plurimis quoque interdum
comendans. Americus Vespucius in Lisbona.

Præmissae eodem Christo monimia facte
Tempore venire cetera multa pretia.

†††

Finita, vij. kl. Maij
Anno supra secundum mille primum, vij.
INTRODUCTION
TO COSMOGRAPHY

With Certain Necessary Principles
of Geometry and Astronomy

To which are added

The Four Voyages of
Amerigo Vespucci

A representation of the entire world, both in
the solid and projected on the plane,
Including also lands which were Un-
known to Ptolemy, and have been
Recently Discovered

DISTICH
Since God rules the stars and Cæsar the earth,
Nor earth nor stars have aught greater than these.
TO MAXIMILIAN CAESAR AUGUSTUS

PHILESIUS, NATIVE OF THE VOSGES

Since thy Majesty is sacred throughout the vast world,
Maximilian Cæsar, in the farthest lands,
Where the sun raises its golden head from the eastern waves
And seeks the straits known by Hercules’ name,
Where the midday glows under its burning rays,
Where the Great Bear freezes the surface of the sea;
And since thou, mightiest of mighty kings, dost order
That mild laws should prevail according to thy will;
Therefore to thee in a spirit of loyalty this world map has been dedicated
By him who has prepared it with wonderful skill.

THE END.
If it is not only pleasant but also profitable in life to visit many lands and to see the most distant races (a fact that is made clear in Plato, Apollonius of Tyana, and many other philosophers, who went to the most remote regions for the purpose of exploration), who, I ask, most invincible Maximilian Cæsar, will deny that it is pleasant and profitable to learn from books the location of lands and cities and of foreign peoples,

Which Phœbus sees when he buries his rays beneath the waves,
Which he sees as he comes from the farthest east,
Which the cold northern stars distress,
Which the south wind parches with its torrid heat,
Baking again the burning sands?

(Boethius.)

Who, I repeat, will deny that it is pleasant and profitable to learn from books the manners and
customs of all these peoples? Surely—to express my own opinion—just as it is worthy of praise to travel far, so it can not be foolish for one who knows the world, even from maps alone, to repeat again and again that passage of the Odyssey which Homer, the most learned of poets, wrote about Ulysses:

Tell me, O Muse, of the man who after the capture of Troy
Saw the customs and the cities of many men.

Therefore, studying, to the best of my ability and with the aid of several persons, the books of Ptolemy from a Greek copy, and adding the relations of the four voyages of Amerigo Vespucci, I have prepared for the general use of scholars a map of the whole world—like an introduction, so to speak—both in the solid and projected on the plane. This work I have determined to dedicate to your most sacred Majesty, since you are the lord of the world, feeling certain that I shall accomplish my end and shall be safe from the intrigues of my enemies under your protecting shield, as though under that of Achilles, if I know that I have satisfied, to some extent at least, your Majesty’s keen judgment in such matters. Farewell, most illustrious Cæsar.

At St. Dié, in the year 1507 after the birth of Our Saviour.
ORDER OF TREATMENT

Since no one can obtain a thorough knowledge of Cosmography without some previous understanding of astronomy, nor even of astronomy itself without the principles of geometry, we shall in this brief outline say a few words:

(1) Of the elements of geometry that will be helpful to a better understanding of the material sphere;
(2) Of the meaning of sphere, axis, poles, etc.;
(3) Of the circles of the heavens;
(4) Of a certain theory, which we shall propose, of the sphere itself according to the system of degrees;
(5) Of the five celestial zones, and the application of these and of the degrees of the heavens to the earth;
(6) Of parallels;
(7) Of the climates of the earth;
(8) Of winds, with a general diagram of these and other things;
(9) Of the divisions of the earth, of the various seas, of islands, and of the distances of

\footnote{The word \textit{climate} is here used in its ancient sense of a zone of the earth's surface comprised between two specified parallels of latitude.}
Order of Treatment

places from one another. There will be added also a quadrant useful to the cosmographer.

Lastly, we shall add the four voyages of Amerigo Vespucci. Thus we shall describe the cosmography, both in the solid and projected on the plane.
CHAPTER I

OF THE PRINCIPLES OF GEOMETRY NECESSARY TO AN UNDERSTANDING OF THE SPHERE

Since in the following pages frequent mention will be made of the circle, the circumference, the center, the diameter, and other similar terms, we ought first of all briefly to discuss these terms one by one.

A circle is a plane figure bounded by a line drawn around, and in the middle there is a point, all straight lines drawn from which to the surrounding line are equal to one another.

A plane figure is a figure, no point of which rises above or falls below the lines that bound it.

The circumference is the line that so bounds the circle that all straight lines drawn from the center to the circumference are equal to one another. The circumference is also called in Latin *ambitus, circuitus, curvatura, circulus*, and in Greek *periphereia*.

The center of a circle is a point so situated that all straight lines drawn from it to the line bounding the circle are equal to one another.

A semicircle is a plane figure bounded by the
Principles of Geometry

diameter of the circle and one half of the circumference.

The diameter of a circle is any straight line passing through the center of the circle and extending in both directions to the circumference.

A straight line is the shortest distance between two points.

An angle is the mutual coming together of two lines. It is the portion of a figure increasing in width from the point of intersection.

A right angle is an angle formed by one line falling upon another line and making the two angles on either side equal to each other. If a right angle is bounded by straight lines, it is called plane; if bounded by curved lines, it is called curved or spherical.

An obtuse angle is an angle that is greater than a right angle.

An acute angle is less than a right angle.

A solid is a body measured by length, breadth, and height.

Height, thickness, and depth are the same.

A degree is a whole thing or part of a thing which is not the result of a division into sixtieths.

A minute is the sixtieth part of a degree.

A second is the sixtieth part of a minute.

A third is the sixtieth part of a second, and so on.
CHAPTER II

Sphere, Axis, Poles, Etc., Accurately Defined

Before any one can obtain a knowledge of cosmography, it is necessary that he should have an understanding of the material sphere. After that he will more easily comprehend the description of the entire world which was first handed down by Ptolemy and others and afterward enlarged by later scholars, and on which further light has recently been thrown by Amerigo Vespucci.

A sphere, as Theodosius defines it in his book on spheres, is a solid and material figure bounded by a convex surface, in the center of which there is a point, all straight lines drawn from which to the circumference are equal to one another. And while, according to modern writers, there are ten celestial spheres, there is a material sphere like the eighth (which is called the fixed sphere because it carries the fixed stars), composed of circles joined together ideally by a line and axis crossing the center, that is, the earth.

The axis of a sphere is a line passing through
Geometrical Definitions

the center and touching with its extremities the circumference of the sphere on both sides. About this axis the sphere whirls and turns like the wheel of a wagon about its axle, which is a smoothly rounded pole, the axis being the diameter of the circle itself. Of this Manilius speaks as follows:

Through the cold air a slender line is drawn, Round which the starry world revolves.

The poles, which are also called cardines (hinges) and vertices (tops), are the points of the heavens terminating the axis, so fixed that they never move, but always remain in the same place. What is said here about the axis and the poles is to be referred to the eighth sphere, since for the present we have undertaken the limitation of the material sphere, which, as we have said, resembles the eighth sphere. There are accordingly two principal poles, one the northern, also called Arcticus (arctic) and Borealis (of Boreas), the other the southern, also called Antarcticus (antarctic). Of these Vergil says:

The one pole is always above us, but the other The black Styx and the deep shades see 'neath our feet.

We who live in Europe and Asia see the arctic pole always. It is so called from Arctus, or Arcturus, the Great Bear, which is also named Calisto, Helice, and Septentrionalis, from
Geometrical Definitions

the seven stars of the Wain, which are called *Triones*; there are seven stars also in the Lesser Bear, sometimes called *Cynosura*. Wherefore Baptista Mantuanus says:

Under thy guidance, Helice, under thine, Cynosura, We set sail over the deep, etc.

Likewise, the wind coming from that part of the world is called *Borealis* and *Aquilonicus* (northern). Sailors are accustomed to call *Cynosura* the star of the sea.

Opposite to the arctic pole is the antarctic, whence it derives its name, for ἀντί in Greek is the equivalent of *contra* in Latin. This pole is also called *Noticus* and *Austronoticus* (southern). It can not be seen by us on account of the curvature of the earth, which slopes downward, but is visible from the antipodes (the existence of which has been established). It should be remarked in passing that the downward slope of a spherical object means its swelling or belly; that convexity is the contrary of it and denotes concavity.

There are, besides, two other poles of the zodiac itself, describing two circles in the heavens, the arctic and the antarctic. Since we have made mention of the zodiac, the arctic, and the antarctic (which are circles in the heavens), we shall treat of circles in the following chapter.
CHAPTER III

Of the Circles of the Heavens

There are two kinds of circles, called also *segmina* by authors, on the sphere and in the heavens, not really existing, but imaginary; namely, great and small circles.

A great circle is one which, described on the convex surface of the sphere, divides it into two equal parts. There are six great circles: the equator, the zodiac, the equinoctial colure, the solstitial colure, the meridian, the horizon.

A small circle on the sphere is one which, described on the same surface of the sphere, divides it into two unequal parts. There are four small circles: the arctic, the circle of Cancer, the circle of Capricorn, the antarctic. Thus there are in all ten, of which we shall speak in order, first of the great circles.

The equator, which is also called the girdle of the *primum mobile* and the equinoctial, is a great circle dividing the sphere into two equal parts. Any point of the equator is equally distant from both poles. It is so called because, when the sun crosses it (which happens twice a year, at
The Circles of the Heavens

the first point of Aries, in the month of March, and at the first point of Libra, in the month of September), it is the equinox throughout the world and the day and night are equal. The equinox of March or of Aries is the vernal equinox, the equinox of September or of Libra the autumal.

The zodiac is a great circle intersecting the equator at two points, which are the first points of Aries and Libra. One half of it in- clines to the north, the other to the south. It is so called either from ζώον, meaning an animal, because it has twelve animals in it, or from ζωή, meaning life, because it is understood that the lives of all the lower animals are gov- erned by the movements of the planets. The Latins call it signifer (sign-bearing), because it has twelve signs in it, and the oblique circle. Therefore Vergil says:

Where the series of the signs might revolve obliquely.

In the middle of the width of the zodiac there is a circular line dividing it into two equal parts and leaving six degrees of latitude on either side. This line is called the ecliptic, because no eclipse of the sun or moon ever takes place unless both of them pass under that line in the same or in opposite degrees,—in the same, if it is to be an eclipse of the sun; in
The Circles of the Heavens

opposite, if it is to be an eclipse of the moon. The sun always passes with its center under that line and never deviates from it. The moon and the rest of the planets wander at one time under the line, at another on one side or the other.

There are two colures on the sphere, which are distinguished as solstitial and equinoctial. They are so called from the Greek νομος, which means a member and the Latin ura boves (wild oxen), which Cæsar says, in the fourth book of his "Commentaries," are found in the Hercynian forest and are of the size of elephants, because, just as the tail of an ox when raised makes a semicircular and incomplete member, so the colure always appears to us incomplete, for one half is visible, while the other half is concealed.

The solstitial colure, which is also called the circle of declinations, is a great circle passing through the first points of Cancer and Capricorn, as well as through the poles of the ecliptic and the poles of the world.

The equinoctial colure, in like manner, is a great circle passing through the first points of Aries and Libra and the poles of the world.

The meridian is a great circle passing through

1 The passage referred to is in the sixth book, chapter xxviii, of the Commentaries.
The Circles of the Heavens

the point vertically overhead and the poles of the world. These circles we have drawn ten degrees apart in our world map in the solid and projected on the plane. There is a point in the heavens directly over any object, which is called the zenith.

The horizon, also called finitor (limiting line), is a great circle of the sphere dividing the upper hemisphere (that is, the half of a sphere) from the lower. It is the circle at which the vision of those who stand under the open sky and cast their eyes about seems to end. It appears to separate the part of the heavens that is seen from the part that is not seen. The horizon of different places varies, and the point vertically overhead of every horizon is called the pole, for such a point is equally distant in all directions from the finitor or the horizon itself.

Having thus considered the great circles, let us now proceed to the small circles.

The arctic circle is a small circle which one pole of the zodiac describes about the arctic pole of the world by the motion of the primum mobile.

The antarctic is a small circle which the other pole of the zodiac makes and describes about the antarctic pole of the world. We mean by the pole of the zodiac (of which we spoke also in
The Circles of the Heavens

the preceding chapter), the point that is equally distant from any point on the ecliptic, for the poles of the zodiac are the extremities of the axis of the ecliptic. The distance of the pole of the zodiac from the pole of the world is equal to the greatest declination of the sun (of which we shall say more presently).

The tropic of Cancer is a small circle which the sun, when at the first point of Cancer, describes by the motion of the primum mobile. This point is also called the summer solstice.

The tropic of Capricorn is a small circle which the sun, when at the first point of Capricorn, describes by the motion of the primum mobile. This circle is also called the circle of the winter solstice.

Since we have mentioned declination, it should be remarked that declination occurs when the sun descends from the equinoctial to the tropic of Cancer, or from us to the tropic of Capricorn; that ascension, on the contrary, occurs when the sun approaches the equator from the tropics. It is, however, improperly said by some that the sun ascends when it approaches us and descends when it goes away from us.

Thus far we have spoken of circles. Let us now proceed to the theory of the sphere and a fuller consideration of the degrees by which such circles are distant from one another.
CHAPTER IV

OF A CERTAIN THEORY OF THE SPHERE
ACCORDING TO THE SYSTEM OF DEGREES

The celestial sphere is surrounded by five principal circles, one great and four small—the arctic, the circle of Cancer, the equator, the circle of Capricorn, and the antarctic. Of these the equator is a great circle, the other four are small circles. These circles, or rather the spaces that are between them, authors are wont to call zones. Thus Vergil, in the Georgics, says:

Five zones the heavens contain; whereof is one
Aye red with flashing sunlight, fervent aye
From fire; on either side to left and right
Are traced the utmost twain, stiff with blue ice,
And black with scowling storm-clouds, and betwixt
These and the midmost, other twain there lie,
By the gods' grace to heart-sick mortals given,
And a path cleft between them, where might wheel
On sloping plane the system of the signs.

Of the nature of the zones more will be said in the following pages. Inasmuch as we have mentioned above the pole of the zodiac that
A Certain Theory of the Sphere

describes the arctic circle, therefore in place of further consideration this must be understood to mean the upper pole of the zodiac (situated at an elevation of 66° 9′, and distant from the arctic pole 24° 51″). It must be recalled also that a degree is the thirtieth part of a sign, that a sign is the twelfth part of a circle, and that thirty multiplied by twelve gives three hundred and sixty. So it becomes clear that a degree can be defined as the three hundred and sixtieth part of a circle.

The lower pole of the zodiac describes the antarctic circle, which is situated in the same degree of declination and is at the same distance from the antarctic pole as the upper pole of the zodiac is from the arctic. The inclination of the ecliptic, or the greatest declination of the sun toward the north (which is situated 33° 51″ from the equinoctial), describes the tropic of Cancer.

The other inclination of the ecliptic, or the greatest declination of the sun toward the south (which is situated the same number of degrees as stated before), describes the tropic of Capricorn.

The distance between the tropic of Cancer and the arctic circle is 42° 18′. The distance between the tropic of Capricorn and the antarctic circle is the same.

The middle of the heavens, being equally distant from the poles of the world, makes the equator.

1 Error for 23° 51′. 2 Error for 23° 51″.
Hitherto we have spoken of the five zones and of their distance from one another. We shall now briefly discuss the remaining circles.

The circle of the zodiac is determined by the poles of the zodiac. From the poles to the tropics (that is, to the greatest declinations of the sun or the solstices), the distance is $42° 18'$. The width of the zodiac from the ecliptic toward either of the tropics is $6°$, or in all $12°$.

The solstices and the equinoxes mark the colures of declination and ascension. These intersect under the poles of the world along the axis of the heavens at spherical right angles; likewise along the equator. But the equinoctial colures going along the zodiac make oblique angles, while they make right angles along the zodiac of the solstices. The meridional circle, which is movable, is contained by the same axis under the poles themselves.

The circle of the horizon is determined by the zenith, for, as its upper pole, the zenith is everywhere equally distant from it. The circle of the horizon also divides our hemisphere from the other from east to west, but for those who are beneath the equinoctial, through the two poles of the world. The zenith of every horizon is always distant $90°$, which is the fourth part of a circle, from the circumference of the horizon, while the circumference of the horizon
A Certain Theory of the Sphere

is four times as great as the distance between the zenith and the horizon.

It is worthy of notice that the axis of the world in the material sphere passes diametrically from the poles through the center of the world, which is the earth.

The axis of the zodiac, however, is not apparent in the sphere, but has to be conceived. This intersects the middle of the axis of the world, making unequal or oblique angles at the center.

In this way, in the very creation of the world there seems to be a wonderful order and extraordinary arrangement. The old astronomers, in describing the form of the world, followed, as far as possible, in the footsteps of the Creator Himself, who made all things according to number, weight, and dimensions. We, too, while treating of this subject, inasmuch as we are so hampered by the conditions of our space that our system of minutes can be perceived only with difficulty, or not at all, and, if perceived, would beget even annoyance as well as error, shall infer the positions of circles from the markings of degrees in full. For there is not much difference between 51' and a full degree, which contains 60', as we have said before, and in the book on the sphere and elsewhere it is indicated in exactly this way by specialists on this subject. Therefore in the diagram which
A Certain Theory of the Sphere

we shall here insert for the better understanding of these matters, the tropics of Cancer and Capricorn and the greatest declinations of the sun will be distant $24^\circ$ from the equinoctial, the same as the distance of the poles of the zodiac or the arctic and antarctic circles from the poles of the world, situated at an elevation of over $66^\circ$. 

![Diagram of the sphere with the arctic and antarctic poles labeled.](image)
CHAPTER V


Up to this point we have spoken very briefly of several geometrical principles, of the sphere, the poles, the five zones, the circles of the world, and of a certain theory in regard to these matters. Now, in regular order, if I am not mistaken, we come to the consideration of the application of these circles and degrees to the earth. It should therefore be known that on the earth there are five regions corresponding to the above-mentioned zones. Wherefore Ovid in the Metamorphoses says:

And as two zones the northern heaven restrain,
The southern two, and one the hotter midst,
With five the Godhead girt th' inclosed earth,
And climates five upon its face imprest.
The midst from heat inhabitable: snows
Eternal cover two: 'twixt these extremes
Two temperate regions lie, where heat and cold
Meet in due mixture.

(Metamorphoses, i, 45–51, translated by Howard.)

In order to make the matter clearer, let us
The Five Celestial Zones

state that the four small circles, the arctic, the circle of Cancer, the circle of Capricorn, and the antarctic, divide and separate the five zones of the heavens.

In the following diagram let a represent the arctic pole of the world, bc the arctic circle, de the circle of Cancer, fg the circle of Capricorn, hk the antarctic circle, and l the south pole.

The first zone, or the arctic, is all the space included between bac. This zone, being frozen stiff with perpetual cold, is uninhabited.

The second zone is all the space included between bc and de. This is a temperate zone and is habitable.

The third zone is all the space included between de and fg. This zone, on account of its heat, is scarcely habitable; for the sun, describing circles there with a constant whirling motion along the line fe (which for us marks the ecliptic), by reason of its heat makes the zone torrid and uninhabited.

The fourth zone is all the space included between fg and hk. This is a temperate zone and is habitable, if the immense areas of water and the changed conditions of the atmosphere permit it.

The fifth zone is all the space included between hkl. This zone is always stiff with cold and uninhabited.
The Five Celestial Zones

When we say that any zone of the heavens is either inhabited or uninhabited, we wish it to be understood that this applies to the corresponding zone lying beneath that celestial zone. When we say that any zone is inhabited or inhabitable, we mean that it is easily inhabitable. Likewise, when we say that any zone is uninhabited or uninhabitable, we understand that it is habitable with difficulty. For there are many people who now inhabit the dried-up torrid zone, such as the inhabitants of the Golden Chersonese, the Taprobane, the Ethiopians, and a very large part of the earth which had always been unknown, but which has recently been discovered by Amerigo Vespucci. In this connection we may state that we shall add the four voyages of Vespucci, translated from the Italian language into French and from French into Latin.

It must be understood, as the following diagram shows, that the first zone, which is nearest to the arctic pole, is 23° 51' in extent; the second, which is the antarctic, is equal to the arctic, and is therefore the same in extent; the third, a temperate zone, is 42° 18'; the fourth, which is equal to it, is also 42° 18'; the fifth, which is the torrid and is in the middle, is 47° 42'.

1 The peninsula of Malacca in India is probably meant.
2 The people of what is now the island of Ceylon.
The Five Celestial Zones

Let us here insert the diagram.

**Arctic Pole**

**Antarctic Pole**
CHAPTER VI

Of Parallels

Parallels, which are also called Almucantars, are circles or lines equidistant in every direction and at every point, and never running together even if extended to infinity. They bear the same relation to one another as the equator does to the four small circles on the sphere, not that the second is as distant from the third as the first is from the second, for this is false, as is clear from the preceding pages, but that any two circles joined together by a perpendicular are equally distant from each other throughout their extent. For the equator is neither nearer to nor more distant from one of the tropics at any one point than at any other, since it is everywhere distant 23° 51' from the tropics, as we have said before. The same must be said of the distance from the tropics to the two extreme circles, either of which is distant 42° 44" from the nearer tropic at all points.

Although parallels can be drawn at any distance apart, yet, to make the reckoning easier,

1 Error for 42° 18'.
it has seemed to us most convenient, as it seemed to Ptolemy also, in our representation of universal cosmography, both in the solid and projected on the plane, to separate the parallels by as many degrees from one another as the following table shows. To this table a diagram also will be subjoined, in which we shall extend the parallels through the earth on both sides to the celestial sphere.
### Of Parallels

<table>
<thead>
<tr>
<th>Parallels from the equator</th>
<th>Degrees of the heavens</th>
<th>Greatest number of hours in a day</th>
<th>Number of miles in one degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 Of Thule</td>
<td>63</td>
<td>20</td>
<td>28(\frac{1}{2})</td>
</tr>
<tr>
<td>20</td>
<td>61</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>58</td>
<td>18</td>
<td>32(\frac{1}{2})</td>
</tr>
<tr>
<td>18</td>
<td>56</td>
<td>17</td>
<td>1(\frac{1}{2}) (sic P)</td>
</tr>
<tr>
<td>17</td>
<td>54</td>
<td>17</td>
<td>37(\frac{1}{2})</td>
</tr>
<tr>
<td>16 Of the Rhiphaean Mts. 7</td>
<td>51(\frac{1}{2})</td>
<td>16(\frac{1}{2})</td>
<td>40(\frac{1}{2})</td>
</tr>
<tr>
<td>15 Of the Borysthenes (Dnieper) 6</td>
<td>48(\frac{1}{2})</td>
<td>16</td>
<td>42(\frac{1}{2})</td>
</tr>
<tr>
<td>14</td>
<td>45</td>
<td>15(\frac{1}{2})</td>
<td>44</td>
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<tr>
<td>13</td>
<td>43(\frac{1}{2})</td>
<td>15(\frac{1}{2})</td>
<td>45</td>
</tr>
<tr>
<td>12 Of Rome</td>
<td>40(\frac{1}{2})</td>
<td>15</td>
<td>47</td>
</tr>
<tr>
<td>11</td>
<td>38(\frac{1}{2})</td>
<td>14(\frac{1}{2})</td>
<td>48(\frac{1}{2})</td>
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<td>9</td>
<td>33(\frac{1}{2})</td>
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<td></td>
</tr>
<tr>
<td>8 Of Alexandria</td>
<td>30(\frac{1}{2})</td>
<td>14</td>
<td>54</td>
</tr>
<tr>
<td>7</td>
<td>27(\frac{1}{2})</td>
<td>13(\frac{1}{2})</td>
<td></td>
</tr>
<tr>
<td>6 Of Syene</td>
<td>23(\frac{1}{2})</td>
<td>13(\frac{1}{2})</td>
<td>57</td>
</tr>
<tr>
<td>5</td>
<td>20(\frac{1}{2})</td>
<td>13(\frac{1}{4})</td>
<td></td>
</tr>
<tr>
<td>4 Of Meroe</td>
<td>16(\frac{1}{2})</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>12(\frac{1}{2})</td>
<td>12(\frac{1}{4})</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>8(\frac{1}{2})</td>
<td>12(\frac{1}{4})</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>4(\frac{1}{2})</td>
<td>12(\frac{1}{4})</td>
<td>59</td>
</tr>
<tr>
<td>Equator equidistant from the poles</td>
<td>12 always 60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>4(\frac{1}{2})</td>
<td>12(\frac{1}{4})</td>
<td>59</td>
</tr>
<tr>
<td>2</td>
<td>8(\frac{1}{2})</td>
<td>12(\frac{1}{4})</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>12(\frac{1}{2})</td>
<td>12(\frac{1}{4})</td>
<td></td>
</tr>
<tr>
<td>4 Anti-climate of Meroe</td>
<td>16(\frac{1}{2})</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>20(\frac{1}{2})</td>
<td>13(\frac{1}{4})</td>
<td></td>
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</tbody>
</table>
Of Parallels

<table>
<thead>
<tr>
<th>Parallels &amp; Climates</th>
<th>Degrees</th>
<th>Hours</th>
<th>Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 Anti-Climate of Syene</td>
<td>23½°</td>
<td>13¾</td>
<td>52</td>
</tr>
<tr>
<td>7</td>
<td>27¾°</td>
<td>13¾</td>
<td></td>
</tr>
</tbody>
</table>

And so on toward the Antarctic Pole, as the following diagram shows:
CHAPTER VII

OF CLIMATES

Although the word *climate* properly means a region, it is here used to mean a part of the earth between two equidistant parallels, in which from the beginning to the end of the climate there is a difference of a half-hour in the longest day. The number of any climate, reckoned from the equator, indicates the number of half-hours by which the longest day in that climate exceeds the day that is equal to the night. There are seven of these climates, although to the south the seventh has not yet been explored. But toward the north Ptolemy discovered a country that was hospitable and habitable, at a distance represented by seven half-hours. These seven climates have obtained their names from some prominent city, river, or mountain.

1. The first climate is called Dia Meroes (of Meroe, modern Shendi), from διά, which in Greek means *through* and governs the genitive case, and Meroe, which is a city of Africa situated in the torrid zone $16^\circ$ on this side of the equator, in the same parallel in which the Nile is found. Our world map, for the better understanding of which this is written, will clearly
Of Climates

show you the beginning, the middle, and the end of this first climate and also of the rest, as well as the hours of the longest day in every one of them.

2. Dia Sienes (of Syene, modern Assuan), from Syene, a city of Egypt, the beginning of the province of Thebais.

3. Dia Alexandrias (of Alexandria), from Alexandria, a famous city of Africa, the chief city of Egypt, founded by Alexander the Great, of whom it has been said by the poet:

One world is not enough for the youth of Pella.1

—(Juvenal, x, 168.)

4. Dia Rhodon (of Rhodes), from Rhodes, an island on the coast of Asia Minor, on which in our time there is situated a famous city of the same name, which bravely resisted the fierce and warlike attacks of the Turks and gloriously defeated them.

5. Dia Rhomes (of Rome), from a well-known city of Europe, the most illustrious among the cities of Italy and at one time the famous conqueror of all nations and the capital of the world. It is now the abode of the great Father of Fathers.

6. Dia Borysthenes (of Borysthenes, modern Dnieper), from a large river of the Scythians, the fourth from the Danube.

1A city in Macedonia, the birthplace of Alexander.
Of Climates

7. Dia Rhipheon (of the Rhiphæan Mountains), from the Rhiphæan mountains, a prominent range in Sarmatian Europe, white with perpetual snow.

From these prominent places, through which approximately the median lines of the climates pass, the seven climates established by Ptolemy derive their names.

The eighth climate Ptolemy did not locate, because that part of the earth, whatever it is, was unknown to him, but was explored by later scholars. It is called Dia Tyles (of Thule, modern Iceland or Shetland), because the beginning of the climate, which is the twenty-first parallel from the equator, passes directly through Thule. Thule is an island in the north, of which our poet Vergil says:

The farthest Thule will serve.

—(Georgics, i, 30.)

So much for the climates north of the equator. In like manner we must speak of those which are south of the equator, six of which having corresponding names have been explored and may be called Antidia Meroes (Anti-climate of Meroe), Antidia Alexandrias, Antidia Rhodon, Antidia Rhomes, Antidia Borysthenes, from the Greek particle *avrl*, which means *opposite* or *against*. In the sixth climate toward the antarctic there are situated the farthest part
Of Climates

of Africa, recently discovered, the islands Zanzibar, the lesser Java, and Seula (Sumatra?), and the fourth part of the earth, which, because Amerigo discovered it, we may call Amerige, the land of Amerigo, so to speak, or America. It is of these southern climates that these words of Pomponius Mela, the geographer, must be understood, when he says:

The habitable zones have the same seasons, but at different times of the year. The Antichthones inhabit the one, and we the other. The situation of the former zone being unknown to us on account of the heat of the intervening zone, I can speak only of the situation of the latter. —(Perieg. i, 1, 9.)

Here it should be remarked that each one of the climates generally bears products different from any other, inasmuch as the climates are different in character and are controlled by different influences of the stars. Wherefore Vergil says:

Nor can all climes all fruits of earth produce.

* * * * * * * * * * * *

Here blithelier springs the corn, and here the grape, Their earth is green with tender growth of trees And grass unbidden. See how from Tmolus comes The saffron’s fragrance, ivory from Ind, From Saba’s weakling sons their frankincense, Iron from the naked Chalybs, castor rank From Pontus, from Epirus the prize-palms O’ the mares of Elis.

—(Georgics, i, 54-59, translated by Rhoades.)
CHAPTER VIII
OF THE WINDS

Since in the preceding pages we have mentioned the winds now and then (when we spoke of the north pole, the south pole, etc.), and as it is understood that a knowledge of winds is of some importance, or rather of great advantage, to cosmography, we shall for these reasons say something in this chapter about winds, also called spiritus and flatus (breeze). A wind, therefore, as defined by the philosophers, is an exhalation, warm and dry, moving laterally around the earth, etc.

Now, inasmuch as the sun has a triple rising and setting, the summer rising and setting, the equinoctial rising and setting, and the winter rising and setting, according to its relation to the two tropics and the equator, and inasmuch as there are also two sides—to the north and to the south, all of which have winds peculiar to them; therefore it follows that there are twelve winds in all, three eastern, three western, three northern, and three southern. Of these the four which in the following diagram occupy the middle place are the principal winds; the others are secondary.
The poets, however, by poetic license, according to their custom, instead of the principal winds use their secondary winds, which are also called side winds. Thus Ovid says:

Far to the east
Where Persian mountains greet the rising sun
Eurus withdrew. Where sinking Phæbus' rays
Glow on the western shores mild Zephyr fled.
Terrific Boreas frozen Scythia seiz'd,
Beneath the icy bear. On southern climes
From constant clouds the showery Auster rains.
—(Metamorphoses, i, 61-66, translated by Howard.)
Of the Winds

The east wind (Subsolanus), which is rendered by the sun purer and finer than the others, is very healthful.

The west wind (Zephyrus), having a mixture of heat and moisture, melts the snows. Whence Vergil's verse:

Melts from the mountain's hoar, and Zephyr's breath
Unbinds the crumbling clod.

—(Georgics, i, 44, translated by Rhoades.)

The south wind (Auster) frequently presages storms, hurricanes, and showers. Wherefore Ovid says:

Notus rushes forth
On pinions dropping rain.

—(Metamorphoses, i, 264, translated by Howard.)

The north wind (Aquilo), by reason of the severity of its cold, freezes the waters.

And frosty winter with his north the sea's face rough doth wear.

—(Vergil, Æneid, iii, 285, translated by Morris.)

In regard to these winds, I remember, our poet Gallinarius, a man of great learning, composed the following:

Eurus and Subsolanus blow from the east.
Zephyrus and Favonius fill the west with breezes.
Auster and Notus rage on Libya's farthest shores.
Boreas and Aquilo cloud-dispelling threaten from the north.
The purpose of this little book is to write a... as a globe and as a projection. The globe I have usually mark off and divide their farms by boundaries of the world by the emblems of their rulers. Europe we have placed the eagles of the Roman Empire (which is the symbol of the Holy Father) we have the Roman Church. The greater part of Africa are the emblems of the supreme Sultan of Babylon of Asia called Asia Minor we have surrounded with the symbol of the Sultan of the Turks, who rules Sarmatian Scythia. Asiatic Scythia we have marked Khan. A red cross symbolizes Prester John (who is Biberith); and finally on the fourth division of the have placed the emblems of those sovereigns. crosses shallow places in the sea where shipwreck.
description of the world map, which we have designed, both designed on a small scale, the map on a larger. As farmers ry lines, so it has been our endeavor to mark the chief coun-

And (to begin with our own continent) in the middle of Empire (which rule the kings of Europe), and with the key e enclosed almost the whole of Europe, which acknowledges and a part of Asia we have distinguished by crescents, which sia, the lord of all Egypt, and of a part of Asia. The part h a saffron-colored cross joined to a branding iron, which is the hia this side of the Imaus, the highest mountains of Asia and ted by anchors, which are the emblems of the great Tartar o rules both eastern and southern India and who resides in the earth, discovered by the kings of Castile and Portugal, we And what is to be borne in mind, we have marked with may be feared. Herewith we close.
Of the Winds

Although the north winds are naturally cold, they are softened because they pass through the torrid zone. This has been found to be true of the south wind, which passes through the torrid zone before it reaches us, as is shown in the following lines:

Wherever the cold south wind goes, it rages and binds the waters with tight fetters. But until with its blast it passes through the torrid regions, it comes welcome to our shores and hurls back the merciless shafts of the north wind. The latter wind on the contrary, which deals harshly with us, slackening its flight, becomes in like manner gentler in the lowest part of the globe. The other winds, where they direct their various courses, soon change, as they go, the natures which are proper to their homes.

We have said enough about winds. We shall now insert a general map, indicating the poles, the axes, the circles, great as well as small, the east, the west, the five zones, the degrees of longitude and latitude, both on the earth and in the heavens, the parallels, the climates, the winds, etc.
CHAPTER IX

OF CERTAIN ELEMENTS OF COSMOGRAPHY

It is clear from astronomical demonstrations that the whole earth is a point in comparison with the entire extent of the heavens; so that if the earth's circumference be compared to the size of the celestial globe, it may be considered to have absolutely no extent. There is about a fourth part of this small region in the world which was known to Ptolemy and is inhabited by living beings like ourselves. Hitherto it has been divided into three parts, Europe, Africa, and Asia.

Europe is bounded on the west by the Atlantic Ocean, on the north by the British Ocean, on the east by the river Tanais (modern Don), Lake Maeotis (modern Sea of Azov), and the Black Sea, and on the south by the Mediterranean Sea. It includes Spain, Gaul, Germany, Rætia, Italy, Greece, and Sarmatia. Europe is so called after Europa, the daughter of King Agenor. While with a girl's enthusiasm she was playing on the sea-shore accompanied by her Tyrian maidens and was gathering flowers in baskets, she is believed to have been carried off by
Of Certain Elements of Cosmography

Jupiter, who assumed the form of a snow-white bull, and after being brought over the seas to Crete seated upon his back to have given her name to the land lying opposite.

Africa is bounded on the west by the Atlantic Ocean, on the south by the Ethiopian Ocean, on the north by the Mediterranean Sea, and on the east by the river Nile. It embraces the Mauritanias, viz., Tingitana (modern Tangiers) and Cæsarea, inland Libya, Numidia (also called Mapalia), lesser Africa (in which is Carthage, formerly the constant rival of the Roman empire), Cyrenaica, Marmarica (modern Barca), Libya (by which name also the whole of Africa is called, from Libs, a king of Mauritania), inland Ethiopia, Egypt, etc. It is called Africa because it is free from the severity of the cold.

Asia, which far surpasses the other divisions in size and in resources, is separated from Europe by the river Tanais (Don) and from Africa by the Isthmus, which stretching southward divides the Arabian and the Egyptian seas. The principal countries of Asia are Bithynia, Galatia, Cappadocia, Pamphylia, Lydia, Cilicia, greater and lesser Armenia, Colchis, Hyrcania, Iberia, and Albania; besides many other countries which it would only delay us to enumerate one by one. Asia is so called after a queen of that name.
Of Certain Elements of Cosmography

Now, these parts of the earth have been more extensively explored and a fourth part has been discovered by Amerigo Vespucci (as will be set forth in what follows). Inasmuch as both Europe and Asia received their names from women, I see no reason why any one should justly object to calling this part Amerige, i.e., the land of Amerigo, or America, after Amerigo, its discoverer, a man of great ability. Its position and the customs of its inhabitants may be clearly understood from the four voyages of Amerigo, which are subjoined.

Thus the earth is now known to be divided into four parts. The first three parts are continents, while the fourth is an island, inasmuch as it is found to be surrounded on all sides by the ocean. Although there is only one ocean, just as there is only one earth, yet, being marked by many seas and filled with numberless islands, it takes various names. These names may be found in the Cosmography, and Priscian in his translation of Dionysius enumerates them in the following lines:

"The vast abyss of the ocean, however, surrounds the earth on every side; but the ocean, although there is only one, takes many names. In the western countries it is called the Atlantic Ocean, but in the north, where the Arimaspi are ever warring, it is called the sluggish sea,
Of Certain Elements of Cosmography

the Saturnian Sea, and by others the Dead Sea,

Where, however, the sun rises with its first light, they call it the Eastern or the Indian Sea. But where the inclined pole receives the burning south wind, it is called the Ethiopian or the Red Sea,

Thus the great ocean, known under various names, encircles the whole world;

"Of its arms the first that stretches out breaks through Spain with its waves, and extends from the shores of Libya to the coast of Pamphylia. This is smaller than the rest. A larger gulf is the one that enters into the Caspian land, which receives it from the vast waters of the north. The arm of the sea which Tethys (the ocean) rules as the Saturnian Sea is called the Caspian or the Hyrcanian. But of the two gulfs that come from the south sea, one, the Persian, running northward, forms a deep sea, lying opposite the country where the Caspian waves roll; while the other rolls and beats the shores of Panchæa and extends to the south opposite to the Euxine Sea.

"Let us begin in regular order with the waters of the Atlantic, which Cadiz makes
Of Certain Elements of Cosmography

famous by Hercules' gift of the pillar, where Atlas, standing on a mountain, holds up the columns that support the heavens. The first sea is the Iberian, which separates Europe from Libya, washing the shores of both. On either side are the pillars. Both face the shores, the one looking toward Libya, the other toward Europe. Then comes the Gallic Sea, which beats the Celtic shores. After this the sea, called by the name of the Ligurians, where the masters of the world grew up on Latin soil, extends from the north to Leucopetra; where the island of Sicily with its curving shore forms a strait. Cyrnos (modern Corsica) is washed by the waters that bear its name and flow between the Sardinian Sea and the Celtic. Then rolls the surging tide of the Tyrhrenian Sea, turning toward the south; it enters the sea of Sicily, which turns toward the east and spreading far from the shores of Pachynum extends to Crete, a steep rock, which stands out of the sea, where powerful Gortyna and Phæstum are situated in the midst of the fields. This rock, resembling with its peak the forehead of a ram, the Greeks have justly called Κριοῦ μέταπον (ram's forehead). The sea of Sicily ends at Mt. Garganus on the coast of Apulia.

"Beginning there the vast Adriatic extends toward the northwest. There also is the Ionian
Of Certain Elements of Cosmography

Sea, famous throughout the world. It separates two shores, which, however, meet in one point. On the right fertile Illyria extends, and next to this the land of the warlike Dalmatians. But its left is bounded by the Ausonian peninsula, whose curving shores the three seas, the Tyrrhenian, the Sicilian, and the vast Adriatic, encircle on all sides. Each of these seas within its limits has a wind peculiar to itself. The west wind lashes the Tyrrhenian, the south wind the Sicilian, while the east wind breaks the waters of the Adriatic which roll beneath its blasts.

"Leaving Sicily the sea spreads its deep expanse to the greater Syrtis which the coast of Libya encircles. After the greater Syrtis passes into the lesser, the two seas beat far and wide upon the re-echoing shores. From Sicily the Cretan Sea stretches out toward the east as far as Salmonis, which is said to be the eastern end of Crete.

"Next come two vast seas with dark waves, lashed by the north wind coming from Ismarus, which rushes straight down from the regions of the north. The first, called the Pharian Sea, washes the base of a steep mountain. The second is the Sidonian Sea, which turns toward the north, where the gulf of Issus joins it. This sea does not continue far in a straight line; for it is broken by the shores of Cilicia. Then
Of Certain Elements of Cosmography

bending westward it winds like a dragon because, forcing its way through the mountains, it devastates the hills and worries the forests. Its end bounds Pamphylia and surrounds the Chelidonian rocks. Far off to the west it ends near the heights of Patara.

"Next look again toward the north and behold the Ægean Sea, whose waves exceed those of all other seas, and whose vast waters surround the scattered Cyclades. It ends near Imbros and Tenedos, near the narrow strait through which the waters of the Propontis issue, beyond which Asia with its great peoples extends to the south, where the wide peninsula stretches out. Then comes the Thracian Bosporus, the mouth of the Black Sea. In the whole world they say there is no strait narrower than this. There are found the Symplegades, close together. There to the east the Black Sea spreads out, situated in a northeasterly direction. From either side a promontory stands out in the middle of the waters; one, coming from Asia on the south, is called Carambis; the other on the opposite side juts out from the confines of Europe and is called Κριον μέτωπον (ram's forehead.) They face each other, therefore, separated by a sea so wide that a ship can cross it only in three days. Thus you may see the Black Sea looking like a double sea, resembling the curve of a bow, which
Of Certain Elements of Cosmography

is bent when the string is drawn tight. The right side resembles the string, for it forms a straight line, outside of which line is found Carambis only, which projects toward the north. But the coast that encloses the sea on the left side, making two turns, describes the arc of the bow. Into this sea toward the north Lake Maeotis (modern Sea of Azov) enters, enclosed on all sides by the land of the Scythians, who call Lake Maeotis the mother of the Black Sea. Indeed, here the violent sea bursts forth in a great stream, rushing across the Cimmerian Bosporus (modern Crimea), in those cold regions where the Cimmerians dwell at the foot of Taurus. Such is the picture of the ocean; such the glittering appearance of the deep."

(Priscian, Periegesis, 37, fol., ed. of Krehl.)

The sea, as we have said before, is full of islands, of which the largest and the most important, according to Ptolemy, are the following:

Taprobane (modern Ceylon), in the Indian Ocean under the equator; Albion, also called Britain and England; Sardinia, in the Mediterranean Sea; Candia, also called Crete, in the Aegian Sea; Selandia; Sicily, in the Mediterranean Sea; Corsica; Cyprus.

Unknown to Ptolemy: Madagascar, in the Prasodes Sea; Zanzibar; Java, in the East Indian
Of Certain Elements of Cosmography

Ocean; Angama; Peuta, in the Indian Ocean; Seula; Zipangri (Japan), in the Western Ocean.

Of these Priscian says:

"These are the large islands which the waters of the ocean surround. There are many other smaller islands, scattered about in different parts of the world, that are unknown, and that are either difficult of access to hardy sailors or suitable for harbors. Their names I cannot easily express in verse."

(Periegesis, 609-613.)

In order to be able to find out the distance between one place and another, the elevation of the pole must first be considered. It should therefore be briefly remarked that, as is clear from what precedes, both poles are on the horizon for those who live on the parallel of the equator. But as one goes toward the north, the elevation of the pole increases the farther one goes away from the equator. This elevation of the pole indicates the distance of places from the equator. For the distance of any place from the equator varies as the elevation of the pole at that place. From this the number of miles is easily ascertained, if you will multiply the number of degrees of elevation of the pole. But according to Ptolemy, from the equator to the arctic pole miles are not equal in all parts of the world. For any one of the degrees from the
Of Certain Elements of Cosmography

first degree of the equator up to the twelfth contains sixty Italian miles, which are equivalent to fifteen German miles, four Italian miles being generally reckoned equal to one German mile. Any degree from the twelfth degree up to the twenty-fifth contains fifty-nine miles, or fourteen and three-quarter German miles.

In order to make the matter clearer, we shall insert the following table:

<table>
<thead>
<tr>
<th>Degrees</th>
<th>Degrees</th>
<th>Italian Miles</th>
<th>German Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equator—</td>
<td>1 up to 12 cont’ng</td>
<td>60</td>
<td>15</td>
</tr>
<tr>
<td>Tropic—</td>
<td>12</td>
<td>25</td>
<td>59</td>
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<td></td>
<td>25</td>
<td>30</td>
<td>54</td>
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<td>26</td>
</tr>
<tr>
<td>Arctic Circle—</td>
<td>66</td>
<td>70</td>
<td>21</td>
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<tr>
<td></td>
<td>70</td>
<td>80</td>
<td>6</td>
</tr>
<tr>
<td>Arctic Pole—</td>
<td>80</td>
<td>90</td>
<td>0</td>
</tr>
</tbody>
</table>

1 Error for 11 3/4.

In like manner from the equator to either arctic or antarctic pole the number of miles in a degree of latitude varies. If you wish to find out the number of miles between one place and another, examine carefully in what degree of latitude the two places are and how many degrees there are between them; then find out from the above table how many miles there are in a degree of that kind, and multiply this number.
Of Certain Elements of Cosmography

by the number of degrees between the places. The result will be the number of miles between them. Since these will be Italian miles, divide by four and you will have German miles.

All that has been said by way of introduction to the Cosmography will be sufficient, if we merely advise you that in designing the sheets of our world-map we have not followed Ptolemy in every respect, particularly as regards the new lands, where on the marine charts we observe that the equator is placed otherwise than Ptolemy represented it. Therefore those who notice this ought not to find fault with us, for we have done so purposely, because in this we have followed Ptolemy, and elsewhere the marine charts. Ptolemy himself, in the fifth chapter of his first book, says that he was not acquainted with all parts of the continent on account of its great size, that the position of some parts on account of the carelessness of travelers was not correctly handed down to him, and that there are other parts which happen at different times to have undergone variations on account of the cataclysms or changes in consequence of which they are known to have been partly broken up. It has been necessary therefore, as he himself says he also had to do, to pay more attention to the information gathered in our own times. We have therefore arranged matters so that in
Appendix

the plane projection we have followed Ptolemy as regards the new lands and some other things, while on the globe, which accompanies the plane, we have followed the description of Amerigo that we subjoin.

APPENDIX

Before closing, we shall add to the foregoing, as an appendix or corollary, a quadrant, by which may be determined the elevation of the pole, the zenith, the center of the horizon, and the climates; although, if rightly considered, this quadrant, of which we shall speak, has a bearing on this subject. For a cosmographer ought to know especially the elevation of the pole, the zenith, and the climates of the earth. This quadrant, then, is constructed in the following way. Divide any circle into four parts in such a way that the two diameters intersect at the center at right angles. One of these, which has sights at either end, will represent the axis of the poles of the world, the other the equator. Then divide that part of the circle which is between the semi-axis that has the sights and the other semi-diameter into ninety parts and the opposite part also into the same number, fix a plumb-line to the center, and your quadrant will be ready. The quadrant is used as follows: turn it so that you will see the
Appendix

pole directly through the openings in the sights and then toward the climate and the degree to which the plumb-line will fall. Your region, as well as your zenith and the center of your horizon, lies in that climate and at that degree of elevation.

QUADRANT

EQUATOR

PLUMB-LINE

SIGHTS
Appendix

Having now finished the chapters that we proposed to take up, we shall here include the distant voyages of Vespucci, setting forth the consequences of the several facts as they bear upon our plan.

THE END OF THE OUTLINES
PHILESIUS, BORN IN THE VOSGES

To the Reader

Where the fields enriched by the papyrus-producing Siris flower and the lakes of the Moon give birth to mighty rivers, on the right are the mountains of Ius, Danchis, and Mascha, at the foot of which dwell the Ethiopians. From this region rises Africus (southwest wind), which with Libonotus (west-southwest wind) blows over the heated lands. From the other direction blows Vulturnus (east-southeast wind) upon a sweltering people, coming, as it does, in its rapid course over the Indian Ocean. There under the equator lies Taprobana, while Bassa is seen in the Prasodes Sea. Beyond Ethiopia and Bassa in the sea lies a land unknown to your maps, Ptolemy, situated under the tropic of Capricorn and its companion Aquarius. To the right lies a land encircled by the vast ocean and inhabited by a race of naked men. This land was discovered by him whom fair Lusitania boasts of as her king, and who sent a fleet across the sea. But why say more? The position and the customs of the newly-discovered race are set forth in Amerigo’s book. Read this, honest reader, with all sincerity and do not imitate the rhinoceros.

THE END
THE FOUR VOYAGES OF AMERIGO VESPUCCI

TRANSLATED FROM THE FRENCH INTO LATIN

The Translator's Decastich to the Reader.

You who will read, perchance, this slender tome
Will find within a voyage deftly told.
It tells of lands and peoples lately found;
A novel tale well suited to amuse.
A worthy task for Maro's lofty pen,
Which dressed in noble words a theme sublime.
He who the Trojan heroes wand'ring sang
Should eke have sung thy voyages, Vespucci.
When in our book you've visited these lands,
The contents probe; 'tis not the writer's care.

Distich to the Reader.

Since what is new and well told pleases you,
I bring you what's amusing here and new.

THE END.
THE FOUR VOYAGES OF AMERIGO VESPUCCI

To the most illustrious René, King of Jerusalem and of Sicily, Duke of Lorraine and Bar, Amerigo Vespucci pays humble homage and presents appropriate recommendations.

Perchance, most illustrious King, your majesty will be astonished at my foolhardiness, because I feel no apprehension in addressing to you the present long letter, even though I know you to be incessantly occupied with matters of the highest importance and with numerous affairs of State. And I shall be considered not only a presumptuous man but one who has accomplished a useless work in undertaking to send you also a story which hardly concerns your position, addressed by name to Ferdinand, King of Castile, and written in an unattractive and quite unpolished style, as if I were a man unacquainted with the Muses and a stranger to the refining influence of learning. My trust in your merits, and the absolute truth of the following accounts (on matters which neither ancient nor modern authors have written), will perhaps excuse me to your Majesty.
I was urged to write chiefly by the bearer of the present letters, Benvenuto, an humble servant of your Majesty and a friend of whom I need not be ashamed. When this gentleman found me at Lisbon, he begged me to acquaint your Majesty with the things seen by me during my four voyages to different quarters of the globe. For, you must know that I have completed four voyages of discovery to new lands: two of them were undertaken by the order of Ferdinand, the illustrious King of Castile, and carried me toward the west, through the Great Gulf of the Ocean; the other two were undertaken at the command of Manuel, King of Portugal, and carried me toward the south.

I have therefore prepared myself for the task urged upon me by Benvenuto, hoping that your Majesty will not exclude me from the number of your insignificant servants, especially if you recollect that formerly we were good friends. I refer to the years of our youth, when we were fellow-students, and together drank in the elements of grammar under the holy and venerable friar of St. Mark, my uncle, Friar Giorgio Antonio Vespucci—a man of good life and tried learning. Had it been possible for me to follow in his footsteps, I should be quite a different man to-day, as Petrarch says. However that may be, I am not ashamed of being
The Four Voyages of Amerigo Vespucci

what I am; for I have always taken pleasure in virtue for its own sake and in scholarship. If, then, these narratives give you no pleasure whatever, I shall repeat the words which Pliny once wrote to Mæcenas, "Formerly you were wont to take delight in my pleasantry." Your Majesty, it is true, is ever occupied with affairs of State; still, you can secretly steal just a little time in which to read these accounts, trifling though they be. I assure you that their very novelty will please. You will find in these pages no slight relief from the wasting cares and problems of government. My book will serve you as the sweet fennel, which, when taken after meals, is wont to leave a pleasant breath and to promote a better digestion.

If, by chance, I have been more prolix than the subject warrants, I crave your indulgence.

Farewell.
PREFACE

Most illustrious King! Your Majesty must know that I came to this country primarily as a merchant. I continued in that career for the space of four years. But when I observed the various changes of fortune, and saw how vain and fleeting riches are, and how for a time they lift man to the top of the wheel and then hurl him headlong to the bottom—him, who had boasted of wide possessions;—when I saw all this, and after I had personally suffered such experiences, I determined to abandon the business career and to devote all my efforts to worthier and more enduring ends.

And so I set about visiting different parts of the world and seeing its many wonders. Both time and place were favorable to my plans. For Ferdinand, King of Castile, was at that time fitting out four ships to discover new lands in the west, and His Highness made me one of that company of explorers. We set sail from the harbor of Cadiz on the 20th of May, 1497, making our way through the Great Gulf of the
Preface

Ocean. This voyage lasted eighteen months, during which we discovered many lands and almost countless islands (inhabited as a general rule), of which our forefathers make absolutely no mention. I conclude from this that the ancients had no knowledge of their existence. I may be mistaken; but I remember reading somewhere that they believed the sea to be free and uninhabited. Our poet Dante himself was of this opinion, when, in the 18th canto of the Inferno, he pictures the death of Ulysses. From the following pages, however, your Majesty will learn of the marvels I saw.

A description of the chief lands and of various islands, of which ancient authors make no mention, but which recently, in the 1497th year from the incarnation of Our Lord, were discovered in the course of four ocean voyages undertaken by order of their Serene Highnesses of Spain and Portugal. Of these voyages, two were through the western sea, by order of King Ferdinand of Castile; the remaining two were through southern waters, by order of Manuel, King of Portugal. To the above-mentioned Lord Ferdinand, King of Castile, Amerigo Vespucci, one of the foremost captains and commanders of that fleet, dedicates the following account of the new lands and islands.
The First Voyage

In the year of Our Lord 1497, on the 20th day of May, we set sail from the harbor of Cadiz in four ships. On our first run, with the wind blowing between the south and the southwest, we made the islands formerly called the Fortunate Islands, but now the Grand Canary, situated at the edge of the inhabited west and within the third climate. At this place, the North Pole rises 27½ degrees above the horizon, the islands themselves being 280 leagues from the city of Lisbon, in which this present pamphlet was written. There we spent almost eight days, providing ourselves with fuel and water and other necessary things. Then, after first offering our prayers to God, we raised and spread our sails to the wind, shaping our course to the west, with a point to southwest. We kept on this course for some time, and just as the 27th day was past we reached an unknown land, the mainland as we thought. It was distant from the islands of the Grand Canary 1000 leagues, more or less; it was inhabited, and was situated in the Torrid Zone. This we ascertained from the following observations: that the North Pole rises 16 degrees above the horizon of this new land, and that it is 75 degrees more to the west.

1Vespucci names the wind according to the point toward which it blows.
than the islands of Grand Canary—at least so all our instruments showed.

Here we dropped the bow anchors and stationed our fleet a league and a half from the shore. We then lowered a few boats, and, filling them with armed men, we pulled as far as the land. The moment we approached, we rejoiced not a little to see hordes of naked people running along the shore. Indeed, all those whom we saw going about naked seemed also to be exceedingly astonished at us, I suppose because they noticed that we wore clothing, and presented a different appearance from them. When they realized that we had actually arrived, they all fled to a hill near by; and though we beckoned to them and made signs of peace and friendship, we could not induce them to approach. When night closed rapidly upon us, we felt some fear in trusting our ships in such a dangerous roadstead, for there was here no protection against violent seas. We therefore agreed to depart early the next morning in search of some harbor where we might station our ships in a safe anchorage. After we had formed this resolution, we spread our sails to a gentle breeze blowing along the shore, keeping land always in sight and continually seeing the inhabitants along the beach. In this way we sailed for two whole days, and discovered a place quite suited to our
The First Voyage

ships, where we anchored only one-half a league from the land. Here we again saw countless hordes of people. Desiring to see them close by and to speak with them, on that very day we approached the shore in our boats and skiffs, and then we landed in good order, about forty strong. The natives, however, showed themselves very loath to approach us or have anything to do with us. We could do nothing to induce them to speak with us or to enter upon any kind of communication. But finally, by dint of much labor undertaken with this one purpose in view, we managed to allure a few of them by giving them little bells and mirrors and pieces of crystal and other such trifles. In this way they became quite easy about us. They now came to meet us, and in fact to treat concerning terms of peace and friendship. At nightfall we took leave of them and returned to our ships. The next day, when the sun was quite risen, we again saw upon the beach an endless number of men and women, the latter carrying their children with them. We furthermore noticed that they were bringing with them all their household utensils, which will be described below in their proper place. The nearer we approached the shore, more and more of the natives jumped into the water (for there are many expert swimmers among them), and swam out the dis-
The First Voyage

tance of a crossbow shot to meet us. They re-
ceived us kindly, and in fact mingled among us
with as complete assurance as if we had often
met before and had frequently had dealings to-
gether. At this we were then very little pleased.

And now (so far as occasion permits), we shall
devote some space to a description of their cus-
toms,—such as we were able to observe.

ON THE CUSTOMS OF THE NATIVES AND THEIR
MODE OF LIFE

In regard to their life and customs, all of
them, both men and women, go about entirely
naked, with no more covering for their private
parts than when they were born. The men are
of medium size, but are very well proportioned.
The color of their skin approaches red, like the
hair of a lion, and I believe that, if it were
their custom to wear clothing, they would be as
fairskinned as we are. They have no hair on
their body, with the exception of that on the
head, which is long and black, particularly that
of the women, who are beautiful for this very
reason. Their features are not very handsome,
because they have broad cheek-bones like the
Tartars. They do not allow any hair to grow
on their eyebrows nor their eyelids nor any-
where on their body (with the exception of the
head), for this reason,—because they deem it
The First Voyage

course and animal-like to have hair on the body.

All of them, both men and women, are graceful in walking and swift in running. Indeed, even their women (as we have often witnessed) think nothing of running a league or two, wherein they greatly excel us Christians. They all swim remarkably well, in fact better than one would believe possible; and the women are far better swimmers than the men, a statement which I can make with authority, for we frequently saw them swim in the sea for two leagues without any assistance whatsoever.

Their weapons are the bow and arrow, which they have learned to make very skillfully. They are unacquainted with iron and the metals, and consequently, in place of iron, they tip their arrows with the teeth of animals and fishes, and they also often harden the arrows by burning their ends. They are expert archers, with the result that they strike with their arrows whatever they aim at. In some places also the women are very skillful with the bow and arrow. They have other weapons also, such as spears or stakes sharpened at the ends, and clubs with wonderfully carved heads.

They are wont to wage war upon neighbors speaking a different language, fighting most mercilessly and sparing none, except to reserve
them for more cruel torture later. When they go forth to battle, they take their wives with them, not that they too may participate in the fight, but that they may carry behind the fighting men all the necessary provisions. For, as we ourselves have often seen, any woman among them can place on her back, and then carry for thirty or forty leagues, a greater burden than a man (and even a strong man) can lift from the ground. They have no generals and no captains; in fact, since every one is his own leader, they go forth to war in no definite order. They never fight for power or territory, or for any other improper motive. Their one cause for war is an enmity of long standing, implanted in them from olden times. When questioned concerning the cause of such hostility, they give no other reason except that it is to avenge the death of their ancestors. Living as they do in perfect liberty, and obeying no man's word, they have neither king nor lord.

They are, however, especially inclined to war, and gird themselves for braver efforts when one of their own number is either a captive in the hands of the enemy or has been killed by them. In that case the oldest blood-relation of the prisoner or murdered man rises, rushes forth into the roads and villages, shouting and calling upon all, and urging them to hasten into battle with
him to avenge the death of his kinsman. All are quickly stirred to the same feeling, gird themselves for the fight and make a sudden dash upon their enemies.

They observe no laws, and execute no justice. They do not punish their evildoers; indeed, not even the parents rebuke or chastise their children; and, wonderful to relate, we several times saw them quarrel among themselves. They are simple in their speech, but very shrewd and crafty. They speak rarely; and when they do speak, it is in a low tone, using the same sounds as we. On the whole they shape their words either on the teeth or the lips, employing, of course, different words from those of our language. They have many different idioms, for we found such a variety of tongues in every hundred leagues that they do not understand one another.

They observe most barbarous customs in their eating; indeed, they do not take their meals at any fixed hours, but eat whenever they are so inclined, whether it be day or night. At meals they recline on the ground, and do not use either tablecloths or napkins, being entirely unacquainted with linen and other kinds of cloth. The food is served in earthen pots which they make themselves, or else in receptacles made out of half-gourds. They sleep in a species of large
The First Voyage

net made of cotton and suspended in the air; and though this mode of sleeping may appear odd and uncomfortable, I testify that, on the contrary, it is very pleasant; for it was frequently my lot to sleep in such nets, and I had a feeling of greater comfort then than when under the coverlets which we had with us.

In their person they are neat and clean, for the reason that they bathe very frequently.

* * * * * * *

In their sexual intercourse they have no legal obligations. In fact, each man has as many wives as he covets, and he can repudiate them later whenever he pleases, without its being considered an injustice or disgrace, and the women enjoy the same rights as the men. The men are not very jealous; they are, however, very sensual. The women are even more so than the men. I have deemed it best (in the name of decency) to pass over in silence their many arts to gratify their insatiable lust. They are very prolific in bearing children, and do not omit performing their usual labors and tasks during the period of pregnancy. They are delivered with very little pain,—so true is this that on the very next day they are completely recovered and move about everywhere with perfect ease. In fact, immediately after the delivery they go to some stream to wash, and then come out of the water as
The First Voyage

whole and as clean as fishes. However, they are of such a cruel nature and harbor such violent hatreds that, if the husbands chance to anger them, they immediately commit some wrong. For instance, to appease their great wrath, they kill the fetus within their own wombs, and then cause an abortion. In this way countless offspring are destroyed. They have handsome, well-proportioned and well-knit figures; indeed, no blemish can possibly be discovered in them...

No one of this race, as far as we saw, observed any religious law. They can not justly be called either Jews or Moors; nay, they are far worse than the gentiles themselves or the pagans, for we could not discover that they performed any sacrifices nor that they had any special places or houses of worship. Since their life is so entirely given over to pleasure, I should style it Epicurean.

They hold their habitations in common. Their dwellings are bell-shaped, and are strongly built of large trees fastened together, and covered with palm leaves, which offer ample protection against the winds and storms. In some places these dwellings were so large that we found as many as six hundred persons living in a single building. Of all these dwellings we found that eight were most thickly populated; in fact, that ten thousand souls lived within them at one and
The First Voyage

the same time. Every eight or seven years they move the seat of their abodes. When asked the reason for this, they gave a most natural answer. They said that it was on account of the continual heat of a strong sun, and because, from dwelling too long in the same place, the air became infected and contaminated, and brought about various diseases of the body. And in truth, their point seemed to us to be well taken.

Their riches consist of variegated birds' feathers, and of strings of beads (like our pater nosters), made of fish bones, or of green or white stones. These they wear as ornaments on the forehead, or suspended from their lips and ears. Many other such useless trifles are considered riches by them, things to which we attach no value whatever. Among them there is neither buying nor selling, nor is there an exchange of commodities, for they are quite content with what nature freely offers them. They do not value gold, nor pearls, nor gems, nor such other things as we consider precious here in Europe. In fact they almost despise them, and take no pains to acquire them. In giving, they are by nature so very generous that they never deny anything that is asked of them. But as soon as they have admitted any one to their friendship, they are just as eager to ask and to receive. The greatest and surest seal of their
friendship is this: that they place at the disposal of their friends their own wives and daughters, both parents considering themselves highly honored if any one deigns to lead their daughter (even though yet a maiden) into concubinage. In this way (as I have said) they seal the bond of their friendship.

In burying the dead they follow many different customs. Some, indeed, follow the practice of inhumation, placing at the head water and food, for they believe that the dead will eat and subsist thereupon. But there is no further grief at their departure, and they perform no other ceremonies. In some places a most barbarous and inhuman rite is practised. When any one of their fellow-tribesmen is believed to be at the point of death, his relations take him into some great forest, where they place him in one of those nets in which they are accustomed to sleep. They then suspend him thus reclining between two trees, dance around him for a whole day, and then at nightfall return to their habitations, leaving at the head of the dying man water and food to last him about four days. If at the end of this period the sick man can eat and drink, becomes convalescent, regains his health, and returns to his own habitation, then all his relations, whether by blood or marriage, welcome him with the greatest ceremonies. But
The First Voyage

dere are few who can pass safely through so severe an ordeal. Indeed, no one ever visits the sick man after he is abandoned in the woods. Should he, therefore, chance to die, he receives no further burial. They have many other savage rites of burial, which I shall not mention, to avoid the charge of being too prolix.

In their sicknesses they employ many different kinds of medicines, so different from ours and so discordant with our ideas that we wondered not a little how any one could possibly survive. For, as we learned from frequent experience, if any one of them is sick with fever, they immerse and bathe him in very cold water just when the fever is at its height. Then they compel him to run back and forth for two hours around a very warm fire until he is fairly aglow with heat, and finally lead him off to sleep. We saw very many of them restored to health by this treatment. Very frequently they practise also dieting as one of their cures, for they can do without food and drink for three or four days. Again, they commonly draw blood, not from their arms (with the exception of the shoulder-blade), but from their loins and the calves of their legs. Often they bring about vomiting by chewing certain herbs which they use as medicines; and they have, in addition,
many other cures and remedies which it would be tedious to enumerate.

They are full-blooded and phlegmatic, owing to the food they eat, which consists chiefly of roots, fruits, herbs, and fishes of different kinds. They do not raise crops of spelt or of any other grain. Their most common food is a certain root which they grind into a fairly good flour and which some of the natives call iucha, others chambi, and still others ygnami. They very rarely eat flesh, with the exception of human flesh; and in this they are so inhuman and so savage as to outdo even the wild animals. Indeed, all the enemies whom they either kill or capture, without discriminating between the men and the women, are relished by them with such savageness that nothing more barbarous and cruel can either be seen or heard of. Time and again it fell to my lot to see them engaged in this savage and brutal practice, while they expressed their wonder that we did not likewise eat our enemies. Your royal Majesty may rest assured on this point, that their numerous customs are all so barbarous that I can not describe them adequately here. Therefore, considering the many, many things I saw in my four voyages—things so entirely different from our customs and manners—I have prepared and com-

1 The Italian text gives iuca, cazabi, and ignami.
The First Voyage

completed a work which I have entitled "The Four Voyages." In this book I have collected the greater part of the things I saw, and have described them as clearly as my small ability would permit. I have not, however, published it as yet. In this work, each topic is given more careful and individual attention, and therefore in the present pamphlet I shall merely touch upon them, making only general statements. And so I return to complete the account of our first voyage, from which I have made a short digression.

In the beginning of our voyage we did not see anything of great value except a few traces of gold, and this only because they pointed out to us several proofs of its existence in the soil. I suppose we should have learned much more, had we been able to understand their language. In truth, this land is so happily situated that it could not be improved. We unanimously agreed, however, to leave it and to continue our voyage further. And so, keeping land always in sight, and tacking frequently, we visited many ports, in the meanwhile entering upon communications with many different tribes of those regions. After some days we made a certain harbor in which it pleased God to deliver us from a great danger.

As soon as we entered this harbor, we dis-
covered that their whole population, that is to say, the entire village, had houses built in the water, as at Venice. There were in all about twenty large houses, built in the shape of bells (as we have said above), and resting firmly upon strong wooden piles. In front of the doors of each house drawbridges had been erected, over which one could pass from one hut to another as if over a well-constructed road. As soon as the inhabitants of this settlement noticed us they were seized with great fear, and immediately raised the drawbridges to defend themselves against us, and hid themselves within their houses. While we were watching their actions with some degree of wonder, lo and behold about twelve of their boats (which are hollowed out of the trunk of a single tree) came over the water to meet us. The occupants of these boats looked at us and at our clothes with wonder, and rowed about us in every direction, but continued to examine us from a distance. We on our part were similarly observing them, making many signs of friendship to urge them to approach us without fear. But it was of no avail. Seeing their reluctance, we began to row in their direction. They did not await our arrival, but immediately fled to the shore, making signs to us that we should await their return, which (they signified) would be shortly. There-
upon they hurried to a nearby hill, returning thence accompanied by sixteen maidens. With these they embarked in the above-mentioned boats and straightway returned to us. Of the maidens, four were then placed in each one of our ships, a proceeding which, as your Majesty may well believe, astonished us not a little. Then they went back and forth among our ships with their canoes, and spoke to us in such kindly manner that we began to consider them our trusty friends. While all this was going on, behold a large crowd began to swim from their houses (already described) and to advance in our direction. Though they advanced, further and further, and though they were now nearing our ships, we entertained not the slightest suspicion of their actions. At this point, however, we saw some old women standing at the doors of their houses, shouting wildly and filling the air with their cries, and tearing their hair in great distress. We now began to suspect that some great danger was threatening. Immediately the girls who had been placed on board our ships leaped into the sea. Those who were in the canoes pulled off a short distance, drew their bows and began to make a vigorous attack upon us. Moreover, those who had started from their houses and were swimming over the sea toward us, were, each one of them, carrying a lance under
The First Voyage

water. This was sure proof of their treachery, and we began not only to defend ourselves with spirit, but also to inflict serious injuries upon them. In fact, we wrecked and sank many of the canoes, with great loss of life to their occupants,—a loss which became even greater because the natives abandoned their canoes entirely and swam to the shore. About twenty of them were killed and many more were wounded. Of ours only five were injured, all of whom were restored to health, with the help of God. We managed to capture two of the girls and three men. Later we visited the houses of the settlement, and upon entering found them occupied only by two old women and a sick man. We did not set fire to the houses for this reason, that we feared lest our consciences would prick us. We then returned to the ships with our five captives and put them in irons, except the girls. At night, however, both girls and one of the men very shrewdly effected their escape.

On the following day we agreed to leave that port and to sail on along the coast. After a run of about eighty leagues we came to another tribe entirely different from the former in language and customs. We anchored the fleet and approached the shore in our small boats. Here we saw a crowd of about 4,000 persons on the beach. As soon as they realized that we were
about to land, they no longer remained where they were, but fled to the woods and forests, abandoning on the shore everything which they had had with them. Leaping upon the land, we advanced along a road leading to the forest about as far as a crossbow shot. We soon came upon many tents which had been pitched there by that tribe for the fishing season. Within them, many fires had been built for cooking their meals, and animals and fishes of various kinds were being roasted. Among other things we saw that a certain animal was being roasted which looked very much like a serpent, except for the wings which were missing. It looked so strange and so terrible that we greatly wondered at its wild appearance. Proceeding onward through their tents, we found many similar serpents, whose feet were tied and whose mouths were muzzled so that they could not open them, as is done with dogs and other wild animals that they may not bite. Their whole appearance was so savage that we, supposing them to be poisonous, did not dare approach them. They are like a young goat in size, and half as long again as an arm. Their feet are very large and heavy, and are armed with strong claws; their skin is varicolored; their mouth and face like those of a serpent. From the end of the nose to the tip of their tail they are covered (along
the back) with a kind of bristle, from which we decided that they were truly serpents. And yet the above-mentioned tribe eats them. That same tribe makes bread from the fishes which they catch in the sea, the process being as follows: First of all they place the fish in water and boil it for some time; then they pound it and crush it and make it into small cakes which they bake upon hot ashes and which they then eat. Upon tasting them we found them to be not at all bad. They have many other kinds of food, including different fruits and herbs, but it would take too long to describe them.

But to return to our story. Although the natives did not reappear from the woods to which they had fled, we did not take away any of their possessions, in order that we might increase their confidence in us. In fact, we left many small trifles in their tents, placing them where they would be seen, and at night returned to our ships. On the next day, when Titan began to rise above the horizon, we saw a countless multitude upon the shore. We immediately landed; and though the natives still appeared to be somewhat afraid of us, yet they mingled among us, and began to deal and to converse with us with complete security. They signified to us that they would be our friends, that the tents which we saw were not their real
houses, and that they had come to the shore to fish. Therefore they begged us to accompany them to their villages, assuring us that they wished to welcome us as friends. We were made to understand that the cause of the friendship which they had conceived for us was our arrest of those two prisoners, who turned out to be enemies of theirs. And so, seeing the persistence with which they asked us, twenty-three of us decided to go with them, fully armed and with the firm resolve to die valiantly if need be.

After remaining there for three days, we marched inland with them for three leagues and came to a village consisting of but nine habitations. There we were received with such numerous and such barbarous ceremonies that my pen is too weak to describe them. For instance, we were welcomed with dances and with songs, with lamentations mingled with cries of joy and of happiness, with much feasting and banqueting. Here we rested for the night, and the natives most generously offered us their wives. . . . After we had remained that night and half of the next day, a large and wondering crowd came to look at us, without hesitation and fear. Their elders now asked us to go with them to their other villages situated farther inland, to which we again agreed. It is not an easy task to recount the honors which they
The First Voyage

showered upon us here. In short, we went about in their company for nine whole days, visiting very many of their settlements, with the result that (as we afterward learned), our companions whom we had left in the ships began to be very anxious about us and to entertain serious fears for our safety. And so, after having penetrated about eighteen leagues into the interior of the country, we decided to make our way back to the ships. On our return a great crowd of men and women met us and accompanied us all the way to the sea,—a fact which is of itself very remarkable. But there is more. Whenever it happened that one of our company would lag behind from weariness, the natives came to his assistance and carried him most zealously in those nets in which they sleep. In crossing the rivers, too (which in their country are very numerous and very large), they were so careful with the contrivances they employed that we never feared the slightest danger. Moreover, many of them, laden down with their gifts, which they carried in those same nets, accompanied us. The gifts consisted of feathers of very great value, of many bows and arrows, and of numberless parrots of different colors. Many others, also, were bringing their household goods and their animals. In fine, they all reckoned themselves fortunate if, in crossing a
stream, they could bear us on their shoulders or on their backs.

However, we hastened to the sea as quickly as possible. As we were about to embark in our boats, so great was the crowding of the natives in their attempt to accompany us still further and to embark with us and visit our ships, that our boats were almost swamped by the load. We took on board, however, as many as we could accommodate and brought them to our ships. In addition to those whom we had on board, so many of them accompanied us by swimming that we were somewhat troubled by their approach; for, about a thousand of them boarded our ships (naked and unarmed though they were), and examined with wonder our equipment and arrangements and the great size of the ships themselves. And then a laughable thing happened. We desired to shoot off some of our war engines and artillery, and therefore put a match to the guns. These went off with such a loud report that a large portion of the natives, upon hearing this new thunder, leaped into the water and swam away, like frogs sitting on the bank, which jump into the bottom of the marsh and hide the moment they are startled by a noise. In this way acted the natives. Those natives who had fled to another portion of the ships were so thoroughly fright-
The First Voyage

ened that we repented and chid ourselves for what we had done. But we quickly reassured them, and did not permit them to remain any longer in ignorance, explaining that it was with these guns that we killed our enemies.

After entertaining them the whole day upon our ships, we warned them to depart because we intended to sail during the night; whereupon they took leave of us in a most friendly and kindly manner. We saw and learned very many customs of this tribe and region, but it is not my intention to dwell upon them here. Your Majesty will be in a position to learn later of all the more wonderful and noteworthy things I saw in each of my voyages; for I have collected them in one work written after the manner of a geographical treatise and entitled "The Four Voyages." In this work I give individual and detailed descriptions, but I have not yet offered it to the public because I must still revise it and verify my statements.

That land is very thickly populated, and everywhere filled with many different animals, very unlike those of our country. In common with us they have lions, bears, stags, pigs, goats, and fallow deer, which are, however, distinguished from ours by certain differences. They are entirely unacquainted with horses, mules, asses, dogs, and all kinds of small cattle (such as
The First Voyage

sheep and the like), and cows and oxen. They have, however, many species of animals which it would be difficult to name, all of them wild and of no use to them in their domestic affairs. But why say more? The land is very rich in birds, which are so numerous and so large, and have plumes of such different kinds and colors, that to see and describe them fills us with wonder. The climate, moreover, is very temperate and the land fertile, full of immense forests and groves, which are always green, for the leaves never fall. The fruits are countless and entirely different from ours. The land itself is situated in the torrid zone, on the edge of the second climate, precisely on the parallel which marks the tropic of Cancer, where the Pole rises twenty-three degrees above the horizon. During this voyage many came to look at us, marveling at the whiteness of our skin. And when they asked us whence we came, we answered that we had descended from heaven to pay the earth a visit, a statement which was believed on all sides. We established in this land many baptismal fonts or baptisteries, in which they made us baptize countless numbers, calling us in their own tongue “charaibi,”—that is to say, “men of great wisdom.” The country itself is called by them “Parias.”

Later we left that harbor and land, sailing
The First Voyage

along shore and keeping land always in view. We sailed for 870 leagues, making many tacks and treating and dealing with numerous tribes. In many places we obtained gold, but not in great quantities; for it sufficed us for the present to discover those lands and to know that there was gold therein. And since by that time we had already been thirteen months on our voyage, and since the tackle and rigging were very much the worse for wear and the men were reduced by fatigue, we unanimously agreed to repair our small boats (which were leaking at every point) and to return to Spain. Just as we had reached this conclusion, we neared and entered the finest harbor in the world. Here we again met a countless multitude, who received us in a very friendly manner. On the beach we built a new boat with material taken from the other ships and from barrels and casks, placed upon dry land our rigging and military engines, which were almost rotting away in the water, lightened our ships and drew them up on land. Then we repaired them and patched them, and gave them a thorough overhauling. During all these occupations the inhabitants of the country gave us no slight assistance. Indeed, they offered us provisions out of friendship and unasked, so that we consumed very little of our own supplies. This we considered a great boon,
for our supplies at this stage were rather too meager to enable us to reach Spain without stinting ourselves.

We remained in that port thirty-seven days, frequently visiting the villages in company with the natives and being treated with great respect by each and every one of them. When we at last expressed our intention to leave that harbor and to resume our voyage, the natives complained to us that there was a certain savage and hostile tribe, which, at a certain time of the year, came over the sea to their land, and either through treachery or through violence killed and devoured a great number of them. They added that others were led off as prisoners to the enemy’s country and home, and that they could not defend themselves against these enemies, making us understand that that tribe inhabited an island about one hundred leagues out at sea. They related their story to us in such plaintive tones that we took pity on them and believed them, promising that we should exact punishment for the injuries inflicted upon them. Whereat they greatly rejoiced and of their own accord offered to accompany us. We refused for several reasons, agreeing to take seven with us on the following condition: that at the close of the expedition they should return to their country alone and in their own canoes,
The First Voyage

for we did not by any means intend to take the trouble of bringing them back. To this condition they gladly assented, and so we took leave of the natives, who had become our dear friends, and departed.

We sailed about in our refitted ships for seven days, with the wind blowing between the north-east and east. At the end of this period we reached many islands, of which some were inhabited and others not. We thereupon approached one of them; and while endeavoring to anchor our ships we saw a great horde of people on the island, which the inhabitants call Ity. After examining them for some time, we manned the small boats with brave men and three guns, and rowed nearer the shore, which was filled with 400 men and very many women, all of whom (like the others) went about naked. The men were well built, and seemed very warlike and brave, for they were all equipped with their usual arms, namely, the bow and arrow and the lance. Very many of them, moreover, bore round shields or even square shields, with which they defended themselves so skilfully that they were not hindered thereby in shooting their arrows.

When we had come in our boats to within a bowshot of the land, they leaped into the sea and shot an infinite number of arrows at us,
endeavoring might and main to prevent our landing. Their bodies were all painted over with many colors, and were decorated with birds’ feathers. The natives whom we had taken with us noticed this and informed us that whenever the men are so painted and adorned with plumes they are ready for battle. They were, however, so successful in preventing our landing that we were compelled to direct our stone-hurling machines against them. When they heard the report and noticed its power (for many of them had fallen dead), they fled to the shore. We then held a consultation, and forty-two of us agreed to land after them and valiantly to engage in battle with them. This we did. We leaped to the shore fully armed; and the natives made such stout resistance that the battle raged ceaselessly for almost two hours with varying fortune. We gained a signal victory over them, but only a very few of the natives were killed, and not by us but by our cross-bowmen and gunners, which was due to the fact that they very shrewdly avoided our spears and swords. But at last we made a rush upon them with such vigor that we killed many with the points of our swords. When they saw this, and when very many had been killed and wounded, they turned in flight to the woods and forests, leaving us masters of the field. We did
not wish to pursue them any further that day
because we were too fatigued and preferred to
make our way back to our ships. And the joy
of the seven who had come with us from the
mainland was so great that they could scarcely
restrain themselves.

Early the next day we saw a great horde of
people approaching through the island, playing
on horns and other instruments which they use
in war, and again painted and wearing birds'
feathers. It was a wonderful sight to see. We
again discussed what their plans might be, and
decided upon the following course of action:
to gather our forces quickly if the natives offered
us any hostility; to keep constant watch in
turns and in the meantime to endeavor to make
them our friends, but to treat them as enemies
if they rejected our friendship; and finally to
capture as many of them as we could and make
and keep them as our slaves forever. And so
we gathered upon the shore in hollow forma-
tion, armed to the teeth. They, however, did
not oppose the slightest resistance to our land-
ing, I suppose on account of their fear of our
guns. Upon disembarking, fifty-seven strong,
we advanced against them in four divisions
(each man under his respective captain), and
engaged in a long hand-to-hand combat with
them.
The First Voyage

After a long and severe struggle, during which we inflicted great loss upon them, we put the rest to flight and pursued them as far as one of their settlements. Here we made twenty-five prisoners, set fire to the village, and returned to the ships with our captives. The losses of the enemy were very many killed and wounded; on our side, however, only one man was killed, and twenty-two were wounded, all of whom have regained their health, with the help of God.

Our arrangements for the return to our fatherland were now complete. To the seven natives who had come with us from the mainland (five of whom had been wounded in the aforesaid battle), we gave seven prisoners, three men and four women. And they, embarking in a boat which they had seized on the island, returned home filled with great joy and with great admiration for our strength. We set sail for Spain, and at last entered the harbor of Cadiz with our two hundred and twenty-two prisoners, on the 25th day of October, in the year of Our Lord 1499, where we were received with great rejoicing, and where we sold all our prisoners.

And these are what I have deemed to be the more noteworthy incidents of my first voyage.
The Second Voyage

The Second Voyage

The following pages contain an account of my second voyage and of the noteworthy inci-
dents which befell me in the course of that voyage.

We set sail from the harbor of Cadiz, in the year of Our Lord 1489 (sic), on a May day. As soon as we cleared the harbor, we shaped our course for the Cape Verde Islands; and passing in sight of the islands of the Grand Canary group, we sailed on until we reached the island called Fire Island. Here we took on supplies of fuel and of water, and resumed our voyage with a southwest wind. After nineteen days we reached a new land, which we took to be the mainland. It was situated opposite to that land of which mention has been made in our first voyage; and it is within the Torrid Zone, south of the equinoctial line, where the pole rises five degrees above the horizon beyond every climate. The land is 500 leagues to the southwest of the above-mentioned islands.

We discovered that in this country the day is of the same length as the night on the 27th of June, when the sun is on the Tropic of Cancer. Moreover, we found that the country is, in great measure, marshy and that it abounds in large rivers, which cause it to have very thick vegetation and very high and straight trees. In fact,
The Second Voyage

the growth of vegetation was such that we could not at the time decide whether or not the country was inhabited. We stopped our ships and anchored them, and then lowered some of our small boats in which we made for the land. We hunted long for a landing, going here and there and back and forth, but, as has already been said, found the land everywhere so covered with water that there was not a single spot that was not submerged. We saw, however, along the banks of those rivers many indications that the land was not only inhabited, but indeed very thickly populated. We could not disembark to examine such signs of life more closely, and therefore agreed to return to our ships, which we did. We weighed anchor and sailed along the coast with the wind blowing east and southeast, trying time and again, in a course of more than forty leagues, to penetrate into the island itself. But all to no purpose. For we found in that part of the ocean so strong a current flowing from southeast to northwest that the sea was quite unfit for navigation. When we discovered this difficulty, we held a council and determined to turn back and head our ships to the northwest. So we continued to sail along shore and finally reached a body of water having an outer harbor and a most beautiful island at the entrance.
We sailed across the outer harbor that we might enter the inner haven. In so doing, we noticed a horde of natives on the aforesaid island, about four leagues inland from the sea. We were greatly pleased and got our boats ready to land. While we were thus engaged, we noticed a canoe coming in from the open sea with many persons on board, which made us resolve to attack them and make them our prisoners. We therefore began to sail in their direction and to surround them, lest they might escape us. The natives in their turn bent to their paddles and, as the breeze continued to blow but moderately, we saw them raise their oars straight on high, as if to say that they would remain firm and offer us resistance. I suppose that they did this in order to rouse admiration in us. But when they became aware that we were approaching nearer and nearer, they dipped their paddles into the water and made for the land. Among our ships there was a very swift boat of about forty-five tons, which was so headed that she soon got to windward of the natives. When the moment for attacking them had come, they got ready themselves and their gear and rowed off. Since our ship now went beyond the canoe of the natives, these attempted to effect their escape. Having lowered some boats and filled them with brave men, thinking that we would catch them,
we soon bore down on them, but though we pursued them for two hours, had not our caravel which had passed them turned back on them they would have entirely escaped us. When they saw that they were hemmed in on all sides by our small boats and by the ship, all of them (about twenty in number) leaped into the water, albeit they were still about two leagues out at sea. We pursued them with our boats for that entire day, and yet we managed to capture only two of them, the rest reaching land in safety.

In the canoe which they had abandoned, there were four youths, who did not belong to the same tribe, but had been captured in another land. These youths had recently had their virile parts removed, a fact which caused us no little astonishment. When we had taken them on board our ships, they gave us to understand by signs that they had been carried off to be devoured, adding that this wild, cruel, and cannibal tribe were called "Cambali."

We then took the canoe in tow, and advanced with our ships to within half a league of the shore, where we halted and dropped our anchors. When we saw a very great throng of people roaming on the shore, we hastened to reach land in our small boats, taking with us the two men we had found in the canoe that we had attacked. The moment we set foot on dry land, they all
The Second Voyage

fled in great fright to the groves near by and hid in their recesses. We then gave one of the captives permission to leave us, loading him with very many gifts for the natives with whom we desired to be friends, among which were little bells and plates of metal and numerous mirrors. We instructed him, furthermore, to tell the natives who had fled not to entertain any fear on our account, because we were greatly desirous of being their friends. Our messenger departed and fulfilled his mission so well that the entire tribe, about four hundred in number, came to us from out of the forest, accompanied by many women. Though unarmed, they came to where we were stationed with our small boats, and we became so friendly that we restored to them the second of the two men whom we had captured, and likewise sent instructions to our companions, in whose possession it was, to return to the natives the canoe which we had run down. This canoe was hollowed out of the trunk of a single tree, and had been fashioned with the greatest care. It was twenty-six paces long and two ells (bracchia) wide. As soon as the natives had recovered possession of their canoe and had placed it in a secure spot along the river bank, they unexpectedly fled from us and would no longer have anything to do with us. By such an uncivilized
The Second Voyage

act, we knew them to be men of bad faith. Among them we saw a little gold, which they wore suspended from their ears.

We left that country, and after sailing about eighty leagues we found a safe anchorage for our ships, upon entering which we saw such numbers of natives that it was a wonderful sight. We immediately made friends with them and visited in their company many of their villages, where we were honorably and heartily welcomed. Indeed, we bought of them five hundred large pearls in return for one small bell, which we gave them for nothing. In that land they drink wine made from fruits and seeds, which is like that made from chickpeas, or like white or red beer. The better kind of wine, however, is made from the choicest fruits of the myrrh tree. We ate heartily of these fruits and of many others that were both pleasant to the taste and nourishing, for we had arrived at the proper season. This island greatly abounds in what they use for food and utensils, and the people themselves were well mannered and more peacefully inclined than any other tribe we met.

We spent seventeen days in this harbor very pleasantly, and each day a great number of

'So the Latin text, which seems to be in error. The Italian version having, "which they gave us for nothing."'
The Second Voyage

people would come to us to marvel at our appearance, the whiteness of our skins, our clothes and weapons, and at the great size of our ships. Indeed, they even told us that one of the tribes hostile to them lived further to the west, and possessed an infinite number of pearls; and that those pearls which they themselves possessed had been taken from these enemies in the course of wars which they had waged against them. They gave us further information as to how the pearls were fished and how they grew, all of which we found to be true, as your Majesty will learn later on.

We left that harbor and sailed along the coast, on which we always saw many people. Continuing on our course, we entered a harbor for the purpose of repairing one of our ships. Here again we saw many natives, whom we could neither force nor coax to communicate with us in any way. For, if we made any attempt to land, they resisted most desperately; and if they could not withstand our attack, they fled to the woods, never waiting for us to approach any nearer. Realizing their utter savageness, we departed. While we were thus sailing on, we saw an island fifteen leagues out at sea and resolved to visit it and learn whether or not it was inhabited. Upon reaching it we found it to be inhabited by a race of most
animallike simplicity, and at the same time very obliging and kind, whose rites and customs are the following:

ON THE RITES AND CUSTOMS OF THIS TRIBE.

They were animallike in their appearance and actions, and had their mouths full of a certain green herb which they continually chewed upon as animals chew their cud, with the result that they could not speak. Moreover, each one of them had suspended from his neck two small dried gourds, one of which contained a supply of that herb which they were chewing, while the other contained a kind of white flour resembling plaster or white lime. Every now and then they would thrust into the gourd filled with flour a small stick whose end they had moistened in their mouths. By so doing they managed to gather some of the flour and put it into their mouths, powdering with this flour that herb which they were already chewing. They repeated this process at short intervals; and though we wondered greatly, we could not see any reason for their so doing, nor could we understand their secret.

This tribe came to us and treated us as familiarly as if they had frequently had dealings with us and as if they had long been friendly with us. We strolled with them along the shore, talking
The Second Voyage

the while, and expressed our desire to drink some fresh water. To which they answered, by signs, that there was none in their country, offering us in its stead some herb and flour such as they were chewing. We now understood that since their country lacked water, they chewed that herb and flour to quench their thirst. And so it happened that, though we walked along that shore in their company for a day and a half, we never came across any spring water, and learned that such water as they did drink was the dew which gathered upon certain leaves having the shape of a donkey’s ears. During the night these leaves were filled with dew, of which the people then drank, and it is very good. But in many places these leaves are not found.

This tribe is entirely unacquainted with the solid products of the earth, and live chiefly on the fish which they catch in the sea. Indeed there are many expert fishermen among them, and their waters abound in fish, of which they offered us many turtles and many other most excellent varieties. The women of the tribe, however, do not chew the herb as the men do; in its place, each one of them carries a single gourd filled with water, of which they partake from time to time. They do not have villages composed of individual houses, nor do they have even small huts. Their only shelter is made of
large leaves, which serve indeed to protect them against the heat of the sun, but are not a sufficient protection against the rains, from which it may be deduced that there is little rain in that country. When they come down to the sea to fish, each one brings with him a leaf so large that, by fixing one end of it in the ground and then turning the leaf to follow the sun, he procures underneath its shade ample relief from the great heat. In this island, finally, there are countless species of animals, all of which drink the water of the marshes.

Seeing, however, that there was nothing to be gained on that island, we left it and found another one. We landed and started to search for some fresh water to drink, believing the island to be uninhabited because we had seen no one as we approached it. But as we were walking along the shore, we came upon some very large footprints, from which we judged that, if the other members of the body were in proportion to the size of the feet, the inhabitants must be very large indeed. Continuing our walk along the sands, we discovered a road leading inland, along which nine of us decided to go to explore the island, because it did not seem to be very large nor very thickly populated. After advancing along that road about a league, we saw five houses situated in a valley.
The Second Voyage

and apparently inhabited. Entering them we found five women, two of them old and three young; and all of them were of such large and noble stature that we were greatly astonished. As soon as they laid eyes upon us they were so overcome with surprise that they had no strength left for flight. Thereupon the old woman addressed us soothingly in their own tongue, and, gathering in one hut, offered us great quantities of food. All of them, in truth, were taller than a very tall man; indeed, they were as tall as Francesco degli Albizi, and better knit and better proportioned than we are. When we had observed all this, we agreed to seize the young girls by force and to bring them to Castile as objects of wonder.

While we were still deliberating, behold about thirty-six men began to file through the door of the house, men much larger than the women and so magnificently built that it was a joy to see them. These men caused us such great uneasiness that we considered it safer to return to our ships than to remain in their company. For they were armed with immense bows and arrows, and with stakes and staffs the size of long poles. As soon as they had all entered, they began to talk among themselves as if plotting to take us prisoners, upon seeing which we, too, held a consultation. Some were
of the opinion that we should fall upon them just where they were, within the hut itself; others disapproved of this entirely, and suggested that the attack be made out of doors and in the open; and still others declared that we should not force an engagement until we learned what the natives decided to do. During the discussion of these plans we left the hut disguising our feelings and our intentions, and began to make our way back to the ships. The natives followed at a stone's throw, always talking among themselves. I believe, however, that their fear was no less than ours; for, although they kept us in sight, they remained at a distance, not advancing a single step unless we did likewise. When, however, we had reached the ships and had boarded them in good order, the natives immediately leaped into the sea and shot very many of their arrows after us. But now we had not the slightest fear of them. Indeed, rather to frighten than to kill them, we shot two of our guns at them; and upon hearing the report they hastily fled to a hill nearby. Thus it was that we escaped from them and departed. These natives, like the others, also go about naked; and we called the island the Island of the Giants, on account of the great size of its inhabitants.

We continued our voyage further, sailing a
The Second Voyage

little further off shore than before and being compelled to engage with the enemy every now and then because they did not want us to take anything out of their country. By this time thoughts of revisiting Castile began to enter our minds, particularly for this reason, that we had now been almost a year at sea and that we had very small quantities of provisions and other necessaries left. Even what still remained was all spoiled and damaged by the extreme heat which we had suffered. For, ever since our departure from the Cape Verde Islands, we had continually sailed in the Torrid Zone, and had twice crossed the equator, as we have said above.

While we were in this state of mind, it pleased the Holy Spirit to relieve us of our labors. For, as we were searching for a suitable haven wherein to repair our ships, we reached a tribe which received us with the greatest demonstrations of friendship. We learned, moreover, that they were the possessors of countless large Oriental pearls. We therefore remained among them forty-seven days, and bought 119 marcs of pearls at a price which, according to our estimation, was not greater than forty ducats, for we gave them in payment little bells, mirrors, bits of crystals, and very thin plates of electrum. Indeed, each one would give all the pearls he had for one little bell. We also learned from
The Second Voyage

them how and where the pearls were fished, and they gave us several of the shells in which they grow. We bought some shells in addition, finding as many as 130 pearls in some, and in others not quite so many. Your Majesty must know that unless the pearls grow to full maturity and of their own accord fall from the shells in which they are born, they cannot be quite perfect. Otherwise, as I have myself found by experience time and again, they soon dry up and leave no trace. When, however, they have grown to full maturity, they drop from the fleshy part into the shell, except the part by which it hung attached to the flesh; and these are the best pearls.

At the end of the forty-seven days, then, we took leave of that tribe with which we had become such good friends, and set sail for home on account of our lack of provisions. We reached the island of Antiglia, which Christopher Columbus had discovered a few years before. Here we remained two months and two days in straightening out our affairs and repairing our ships. During this time we endured many annoyances from the Christians settled on that island, all of which I shall here pass over in silence that I may not be too prolix. We left that island on the 27th of July, and after a voyage of a month and a half we at last entered
The Third Voyage

the harbor of Cadiz on the 8th of September, where we were received with great honor. And so ended my second voyage, according to the will of God.

The Third Voyage

I had taken up my abode in Seville, desiring to rest myself a little, to recover from the toils and hardships endured in the voyages described above, intending finally to revisit the land of pearls. But Fortune was by no means done with me. For some reason unknown to me she caused his most serene Lordship, Manuel, King of Portugal, to send me a special messenger bearing a letter which urgently begged me to go to Lisbon as soon as possible, because he had some important facts to communicate to me. I did not even consider the proposition, but immediately sent word by the same messenger that I was not feeling very well and in fact was ill at that moment; adding that, if I should regain my health and if it should still please His Royal Majesty to enlist my services, I should gladly undertake whatever he wished. Whereupon the King, who saw that he could not bring me to him just then, sent to me a second time, commissioning Giuliano Bartolomeo Giocondo,'
The Third Voyage

then in Lisbon, to leave no stone unturned to bring me back to the King. Upon the arrival of the said Giuliano I was moved by his entreaties to return with him to the King—a decision which was disapproved of by all those who knew me. For I was leaving Castile, where no small degree of honor had been shown me and where the King himself held me in high esteem. What was even worse was that I departed without taking leave of my host. I soon presented myself before King Manuel, who seemed to rejoice greatly at my arrival. He then repeatedly asked me to set out with three ships which had been got ready to start in search of new lands. And so, inasmuch as the entreaties of Kings are as commands, I yielded to his wishes.

THE START OF THE THIRD VOYAGE

We set sail in three ships from the harbor of Lisbon, on the 10th of May, 1501, directing our course toward the islands of the Grand Canary. We sailed along in sight of these islands without stopping, and continued our westward voyage along the coast of Africa. We delayed three days in these waters, catching a great number of species of fish called Parghi. Proceeding thence we reached that region of Ethiopia which is called Besilicca', situated in

'Now Goree.
The Third Voyage

the Torrid Zone, within the first climate, and at a spot where the North Pole rises fourteen degrees above the horizon. We remained here eleven days to take on supplies of wood and of water, because it was my intention to sail southward through the Atlantic Ocean. We left that harbor of Ethiopia and sailed to the southwest for sixty-seven days, when we reached an island 700 leagues to the southwest of the above-mentioned harbor. During these days we encountered worse weather than any human being had ever before experienced at sea. There were high winds and violent rainstorms which caused us countless hardships. The reason for such inclement weather was that our ships kept sailing along the equinoctial line, where it is winter in the month of June and the days are as long as the nights, and where our own shadows pointed always to the south.

At last it pleased God to show us new land on the 17th of August. We anchored one league and a half out at sea, and then, embarking in some small boats, we set out to see whether or not the land was inhabited. We found that it was thickly inhabited by men who were worse than animals, as Your Royal Majesty will learn forthwith. Upon landing we did not see any of the natives, although from many signs which we noticed we concluded that the country
must have many inhabitants. We took possession of the coast in the name of the most serene King of Castile, and found it to be a pleasant and fruitful and lovely land. It is five degrees south of the Equator. The same day we returned to our ships; and since we were suffering from the lack of fuel and water, we agreed to land again the following day and provide ourselves with what was necessary. Upon landing we saw on the topmost ridge of a hill many people who did not venture to descend. They were all naked and similar in both appearance and color to those we had met in the former voyages. Though we did our best to make them come down to us and speak with us, we could not inspire them with sufficient confidence. Seeing their obstinacy and waywardness, we returned to our ships at night, leaving on the shore (as they looked on) several small bells and mirrors and other such trifles.

When they saw that we were far out at sea, they came down from the mountain to take the things we had left them, and showed great wonder thereat. On that day we took on a supply of water only. Early in the morning of the next day, as we looked out from our ships, we saw a larger number of natives than before, building here and there along the shore fires which made a great deal of smoke. Supposing
The Third Voyage

that they were thus inviting us, we rowed to the land. We now saw that a great horde of natives had collected, who, however, kept far away from us, making many signs that we should go with them into the interior. Wherefore two of our Christians declared themselves ready to risk their lives in this undertaking and to visit the natives in order to see for themselves what kind of people they were and whether they possessed any riches or aromatic spices. They begged the commander of the fleet so earnestly that he gave his consent to their departure. The two then prepared themselves for the expedition, taking along many trifles, for barter with the natives, and left us, with the understanding that they should make sure to return after five days at the most, as we should wait for them no longer.

They accordingly began their journey inland, and we returned to our ships, where we waited for eight whole days. On almost each of these days a new crowd would come to the shore, but never did they show a desire to enter into conversation with us. On the seventh day, while we again were making our way to the shore, we discovered that the natives had brought all their wives with them. As soon as we landed they sent many of their women to talk with us. But even the women did not trust us sufficiently. While we were waiting for them to approach,
we decided to send to them one of our young men who was very strong and agile; and then, that the women might be the less fearful, the rest of us embarked in our small boats. The young man advanced and mingled among the women; they all stood around him, and touched and stroked him, wondering greatly at him. At this point a woman came down from the hill carrying a big club. When she reached the place where the young man was standing, she struck him such a heavy blow from behind that he immediately fell to the ground dead. The rest of the women at once seized him and dragged him by the feet up the mountain, whereupon the men who were on the mountain ran down to the shore armed with bows and arrows and began to shoot at us. Our men, unable to escape quickly because the boats scraped the bottom as they rowed, were seized with such terror that no one had any thought at the moment of taking up his arms. The natives had thus an opportunity of shooting very many arrows at us. Then we shot four of our guns at them; and although no one was hit, still, the moment they heard the thunderous report, they all fled back to the mountain. There the women, who had killed the youth before our eyes, were now cutting him in pieces, showing us the pieces, roasting them at a large
The Third Voyage

fire which they had made, and eating them. The men, too, made us similar signs, from which we gathered that they had killed our two other Christians in the same manner and had likewise eaten them. And in this respect at least we felt sure that they were speaking the truth.

We were thoroughly maddened by this taunting and by seeing with our own eyes the inhuman way in which they had treated our dead. More than forty of us, therefore, determined to rush to the land and avenge such an inhuman deed and such bestial cruelty. But the commander of our ship would not give his consent; and so, being compelled to endure passively so serious and great an insult, we departed with heavy hearts and with a feeling of great shame, due to the refusal of our captain.

Leaving that land we began to sail between the East and South because the coast line ran in that direction. We made many turns and landings, in the course of which we did not see any tribe which would have any intercourse with us or approach us. We sailed at last so far that we discovered a new land stretching out toward the southwest. Here we rounded a cape (to which we gave the name St. Vincent) and continued our voyage in a southwesterly direction. This Cape St. Vincent is 150 leagues to the
The Third Voyage

southeast of the country where our Christians perished, and eight degrees south of the Equator. As we were sailing along in this manner, one day we noticed on the shore a great number of natives gazing in wonder at us and at the great size of our ships. We anchored in a safe place and then, embarking in our small boats, we reached land. We found the people much kinder than the others; for our toilsome efforts to make them our friends were at last crowned with success. We remained five days among them trading and otherwise dealing with them, and discovered large hollow reed-stalks, most of them still green, and several of them dry on the tops of the trees. We decided to take along with us two of this tribe that they might teach us their tongue; and, indeed, three of them volunteered to return to Portugal with us.

But, since it wearies me to describe all things in detail, may it suffice your Majesty to know that we left that harbor, sailing in a south-westerly direction, keeping always within sight of land, entering many harbors, making frequent landings, and communicating with many tribes. In fact, we sailed so far to the south that we went beyond the Tropic of Capricorn. When we had gone so far south that the South Pole rose thirty-two degrees above the horizon, we
The Third Voyage

lost sight of the Lesser Bear, and the Great Bear itself appeared so low as to be scarcely visible above the horizon. We were then compelled to guide ourselves by the stars of the South Pole, which are far more numerous and much larger and more brilliant than the stars of our Pole. I therefore made a drawing of very many of them, especially of those of the first magnitude, together with the declinations of their orbits around the South Pole, adding also the diameters and semi-diameters of the stars themselves—all of which can be readily seen in my "Four Voyages." In the course of the voyage from Cape St. Augustine, we sailed 700 leagues—100 toward the west and 600 toward the southwest. Should any one desire to describe all that we saw in the course of that voyage, paper would not suffice him. We did not, however, discover anything of great importance with the exception of an infinite number of cassia trees and of very many others which put forth a peculiar kind of leaf. We saw, in addition, very many other wonderful things which it would be tedious to enumerate.

We had now been on our voyage for almost ten months; and, seeing that we discovered no precious metals, we decided to depart thence and to roam over another portion of the sea. As soon as we had come to this conclusion, the
word went to each one of our ships that whatever I should think necessary to command in conducting this voyage should be fulfilled to the letter. I therefore immediately gave a general order that all should provide themselves with fuel and water for six months, for the different captains had informed me that their ships could remain at sea only that much longer.

As soon as my orders had been obeyed, we left that coast and began our voyage to the south on the 13th of February, in other words, when the sun was approaching the equinoctial line and returning to this Northern Hemisphere of ours. We sailed so far that the South Pole rose fifty-two degrees above the horizon, and we could no longer see the stars of the Great or the Lesser Bear. For we were then (the 3rd of April) 500 leagues distant from that harbor from which we had begun our southward voyage. On this day so violent a storm arose that we were forced to gather in every stitch of canvas and to run on with bare masts, the southwest wind blowing fiercely and the sea rolling in great billows, in the midst of a furious tempest. The gale was so terrible that all were alarmed in no slight degree. The nights, too, were very long. For on the 7th of April, when the sun was near the end of Aries, we found that the night was fifteen hours long. Indeed, as
The Third Voyage

your Majesty is very well aware, it was the beginning of winter in that latitude. In the midst of this tempest, however, on the 2nd of April, we sighted land, and sailed along shore for nearly twenty leagues. But we found it entirely uninhabited and wild, a land which had neither harbors nor inhabitants. I suppose it was for the reason that it was so cold there that no one could endure such a rigid climate. Furthermore, we found ourselves in such great danger and in the midst of so violent a storm that the different ships could scarcely sight one another. Wherefore the commander of the fleet and I decided that we should signal to all our shipmates to leave that coast, sail out to sea, and make for Portugal.

This plan proved to be a good and necessary one; for, had we remained there one single night longer, we should all have been lost. The day after we left, so great a storm arose that we feared we should be entirely submerged. For this reason we then made many vows to go on pilgrimages and performed other ceremonies, as is customary with sailors. The storm raged round us for five days, during which we could never raise our sails. During the same time we went 250 leagues out to sea, always getting nearer and nearer the equinoctial line, where both sea and sky became more moderate. And
The Third Voyage

here it pleased God on high to deliver us from the above-mentioned dangers. Our course was shaped to the north and northeast, because we desired to make the coast of Ethiopia, from which we were then distant 1,300 leagues, sailing through the Atlantic Ocean. By the grace of God we reached that country on the 10th of May. We rested there for fifteen days upon a stretch of coast facing the south and called Sierra Leone. Then we took our course toward the Azores, which are 750 leagues from Sierra Leone. We reached them about the end of July and again rested for fifteen days. We then set sail for Lisbon, from which we were 300 leagues to the west. And at last, in the year 1502, we again entered the port of Lisbon, in good health as God willed, with only two ships. The third ship we had burned at Sierra Leone, because she was no longer sea-worthy.

In this third voyage, we remained at sea for nearly sixteen months, during eleven of which we sailed without being able to see the North Star nor the stars of the Great and the Lesser Bear. At that time we steered by the star of the South Pole.

What I have related above I have deemed the most noteworthy events of my third voyage.
I must still relate what I saw in my third (sic) voyage. But, in truth, since I have already been tired out by the length of the preceding narratives, and since this voyage did not at all end as I had hoped, on account of an accident that befell us in the Atlantic Ocean, I may be permitted (I trust), to be somewhat brief.

We left Lisbon in six ships with the intention of exploring an island situated toward the horizon and known as Melcha. This island is famous for its wealth, because it is a stopping place for all ships coming from the Gangetic and Indian Seas, precisely as Cadiz is the port for all vessels going from east to west, or in the opposite direction, as is the case with those ships which sail hence for Calicut. This island of Melcha is further to the west than Calicut and more to the south, which we knew from the following fact: that it is situated within sight of the thirty-third degree of the Antarctic Pole.

And so, on the 10th of May, 1503, we set sail from Lisbon (as I have said above), and made for the Cape Verde Islands, where we took on some needed provisions and many other necessary stores. We remained there twelve days, and then set sail with a south wind, because the commander of the fleet, who was
haughty and headstrong, issued orders that we should make for Sierra Leone, on the southern coast of Ethiopia. There was no necessity for this, and all of us were unanimously opposed to such a course; but he insisted upon it merely to impress upon us that he had been placed in command of us and the six ships. We made good speed, and just as we were at last coming within sight of our destination, so great and violent a tempest arose, and so heavy a gale began to rage, and Fortune became so unkind, that for four days we could not land in spite of the fact that we could see the coast during the whole of that time. Finally we were obliged to give up our attempts and to continue in what should have been our course from the beginning.

We therefore resumed our voyage with the Suduesius wind blowing (a wind which points between the south and the southwest), and sailed through those difficult seas for 300 leagues. In consequence we went across the Equator by almost three degrees, where land was seen by us twelve leagues off. We were greatly astonished at the sight. It was an island situated in the middle of the sea, very high and remarkable in appearance. It was no larger than two leagues in length by one in width. No man had ever been or lived on that island, and yet it
The Fourth Voyage

was to us a most unfortunate island. Upon it the commander of our fleet lost his ship, all owing to his own obstinate mind and will. His ship struck upon a rock, sprung leaks, and sank during the night of St. Lawrence, the 10th of August. With the exception of the crew nothing was saved. The ship was of 300 tons, and the strength of our whole fleet lay in her.

While we were all exerting ourselves to see if we could not, perhaps, float her again, the above-mentioned commander ordered me (among other things) to go in a rowboat to the island in search of a good harbor where we might all draw up our ships in safety. That same commander, however, did not wish me to go with my own ship, because it was manned by nine sailors and was then busily engaged in assisting the endangered ship. He insisted that I go and find such a harbor, where he would restore my ship to me in person. Upon receiving these orders, I went to the island as he desired, taking with me about half the number of my sailors. The island was four leagues away, and hastening thither I discovered a very fine harbor where we might safely anchor our entire fleet. I had now discovered the harbor, and there I spent eight days waiting for the said commander and the rest of our company. I was greatly dis-
The Fourth Voyage

turbed when they did not appear, and those who were with me became so alarmed that they could not be appeased in any way.

While we were in this state of anxiety, on the eighth day we saw a ship coming in over the sea. We at once set out to meet them in order that they might see us, feeling confident and at the same time hoping that they would take us with them to some better harbor. When we had gotten near and had exchanged greetings, those on board informed us that the commander's ship had been lost at sea, the crew alone being saved. Your Majesty can readily imagine the great anxiety which seized me at this report, when I realized that I was 1,000 leagues distant from Lisbon (to which I must needs return) in remote and far-off waters. Nevertheless, we resigned ourselves to the fate that had come upon us and determined to go on. First of all we returned to the island, where we gathered supplies of wood and water for the ship. The island, indeed, was quite uninhabited and most inhospitable; but it had a great deal of spring water, countless trees, and numberless land and sea birds, which were so tame that they permitted us to take them in our hands. We, therefore, took so many of them that we entirely filled one of the rowboats. The only other animals we discovered on that
The Fourth Voyage

island were very large mice, lizards with forked tails, and several serpents.

When we had got our provisions on board, we set sail toward the south and southwest; for we had received orders from the King, that, unless some great danger made it impossible, we should follow in the path of our former voyage. Setting out, therefore, in this direction, we at last found a harbor which we called the Bay of All Saints. Indeed, God had granted us such favorable weather that in less than seventeen days we reached this port, which is 300 leagues distant from the above-mentioned island. In the harbor we found neither the commander-in-chief nor any one else of our company, though we waited for them for two months and four days. At the end of this period, seeing that no one arrived there, my companions and I decided to sail further along the coast. After sailing for 260 leagues, we entered a harbor where we determined to build an outpost. Having done so, we left behind in this fort the twenty-four Christians who had been the crew of the luckless ship of our commander-in-chief. We remained in that harbor five months, occupied in constructing the said fort and in loading our ships with brazil-wood. We tarried thus long because our sailors were few in number and because, owing to the lack of many necessary
parts, our ships could not proceed further. But when all was done, we agreed to return to Portugal, to do which would require a wind between north and northeast.

We left in the fort the twenty-four Christians, giving them twelve guns and many more arms, and supplying them with provisions to last them six months. During our stay we had made friends with the tribes of that country, of which we have here made very little mention, notwithstanding that we saw great numbers of them and had frequent dealings with them. Indeed, we went about forty leagues into the interior in company with thirty of them. I saw on this expedition very many things which I now pass over in silence, reserving them for my book entitled "The Four Voyages." That country is eight degrees south of the equator and thirty-five degrees west of the meridian of Lisbon, according to our instruments.

We set sail hence with the Nornordensius wind (which is between the north and the northeast) shaping our course for the city of Lisbon. At last, praise be to God, after many hardships and many dangers we entered this harbor of Lisbon in less than seventy-seven days, on the 28th of June, 1504. Here we were received with great honor and with far greater festivities than one would think possible. The
The Fourth Voyage

reason was that the entire city thought that we had been lost at sea, as was the case with all the rest of our fleet, who had perished owing to the foolish haughtiness of our commander-in-chief. Behold the manner in which God, the just Judge of all, rewards pride!

I am now living at Lisbon, not knowing what next your most serene Majesty will plan for me to do. As for myself, I greatly desire from now on to rest from my many hardships, in the meantime earnestly commending to your Majesty the bearer of the present letter.

Amerigo Vespucci,

in Lisbon.

Greetings from Walter Lud,
Nicholas Lud,
and Martin Illacimilus

The town, St. Decidius, named for thee, And in the Yogian Mountains reared aloft.

This tome has printed and hereafter off. Will others print, if Christ our helper be.

Finished April 25
MDCVII