The Written Record of the Voyage of 1524 of Giovanni da Verrazano as recorded in a letter to Francis I, King of France, July 8th, 1524

[Adapted from a translation by Susan Tarrow of the Cellere Codex, in Lawrence C. Wroth, ed., The Voyages of Giovanni da Verrazzano, 1524-1528 (Yale, 1970), pp. 133-143]

... Since the storm that we encountered in the northern regions, Most Serene King, I have not written to tell Your Majesty of what happened to the four ships which you sent over the Ocean to explore new lands, as I thought that you had already been informed of everything--how we were forced by the fury of the winds to return in distress to Brittany with only the Normandy and the Dauphine, and that after undergoing repairs there, began our voyage with these two ships, equipped for war, following the coasts of Spain, Your Most Serene Majesty will have heard; and then according to our new plan, we continued the original voyage with only the Dauphine; now on our return from this voyage I will tell Your Majesty of what we found.

We set sail with the Dauphine from the deserted rock near the Island of Madeira, which belongs to the Most Serene King of Portugal on the 17th day of January last; we had fifty men, and were provided with food for eight months, with arms and other articles of war, and naval munitions; we sailed westward on the gentle breath of a light easterly wind. In 25 days we covered eight hundred leagues. On the 24th day of February we went through a storm as violent as ever sailing man encountered. We were delivered from it with the divine help and goodness of the ship, whose glorious name and happy destiny enabled her to endure the violent waves of the sea. We continued on our westerly course keeping rather to the north. In another 25 days we sailed more than four hundred leagues where there appeared a new land which had never been seen before by any man, either Ancient or modern.

At first it appeared to be rather low-lying; having approached within a quarter of a league, we realized that it was inhabited, for huge fires had been built on the seashore. We saw that the land stretched southward, and coasted along it in search of some port where we might anchor the ship and investigate the nature of the land, but in fifty leagues we found no harbor or place where we could stop with the ship.

Seeing that the land continued to the south we decided to turn and skirt it toward the north, where we found the land we had sighted earlier. So we anchored off the coast and sent the small boat in to land. We had seen many people coming to the seashore, but they fled when they saw us approaching; several times they stopped and turned around to look at us in great wonderment. We reassured them with various signs, and some of them came up, showing great delight at...
seeing us and marveling at our clothes, appearance, and our whiteness; they showed us by various signs where we could most easily secure the boat, and offered us some of their food. We were on land, and I shall now tell Your Majesty briefly what we were able to learn of their life and customs.

They go completely naked except that around their loins they wear skins of small animals like martens, with a narrow belt of grass around the body, to which they tie various tails of other animals which hang down to the knees; the rest of the body is bare, and so is the head. Some of them wear garlands of birds’ feathers. They are dark in color, not unlike the Ethiopians, with thick black hair, not very long, tied back behind the head like a small tail. As for the physique of these men, they are well proportioned, of medium height, a little taller than we are. They have broad chests, strong arms, and the legs and other parts of the body are well composed. There is nothing else, except that they tend to be rather broad in the face: but not all, for we saw many with angular faces. They have big black eyes, and an attentive and open look. They are not very strong, but they have a sharp cunning, and are agile and swift runners. From what we could tell from observation, in the last two respects they resemble the Orientals, particularly those from the farthest Sinarian regions.

We could not learn the details of the life and customs of these people because of the short time we spent on land, due to the fact that there were few men, and the ship was anchored on the high seas. Not far from these people, we found others on the shore whose way of life we think is similar.

I will now tell Your Majesty about it, and describe the situation and nature of this land. The seashore is completely covered with fine sand 15 feet deep, which rises in the form of small hills about fifty paces wide. After climbing farther, we found other streams and inlets from the sea which come in by several mouths, and follow the ins and outs of the shoreline. Nearby we could see a stretch of country much higher than the sandy shore, with many beautiful fields and plains full of great forests, some sparse and some dense; and the trees have so many colors, and are so beautiful and delightful that they defy description. And do not think, Your Majesty, that these forests are like the Hyrcanian Forest or the wild wastelands of Scythia and the northern countries, full of common trees; they are adorned and clothed with palms, laurel, cypress, and other varieties of tree unknown in our Europe. And these trees emit a sweet fragrance over a large area, the nature of which we could not examine for the reason stated above, not because we found it difficult to get through the forests—indeed, they are nowhere so dense as to be impenetrable. We think that they belong to the Orient by virtue of the surroundings, and that they are not without some kind of narcotic or aromatic liquor. There are other riches, like gold, which ground of such a color usually denotes. There is an abundance of animals, stags, deer, hares; and also of lakes and pools of running water with various types of bird, perfect for all the
delights and pleasures of the hunt. This land lies at 34 degrees [on a parallel with Carthage and Damascus]]

The air is salubrious and pure, and free from the extremes of heat and cold; gentle winds blow in these regions, and the prevailing winds in summertime, which was beginning when we were there, are northwest and westerly; the sky is clear and cloudless, with infrequent rain, and if occasionally the south winds bring in clouds and murkiness, they are dispelled in an instant, and the sky is once more clear and bright; the sea is calm and unruffled, its waves gentle. And although the whole shore tends to be low and has no harbor it is not dangerous for sailors, since it is quite distinct and without rocks; the water is deep, for at four or five paces from land it is at least 20 feet deep whatever the tide, and this depth increases in relation to the distance from the shore. With such good coastal conditions, no ship in distress in a storm could perish in these parts unless she broke her ropes. And we proved this by experience; for several times at the beginning of March, when the wind usually blow fiercely in any region, we were overwhelmed by storms as we lay at anchor at sea, and we found the anchor broken rather than torn from the seabed or moved at all.

We left this place and continued to follow the coast, which we found veered to the east. All along it we saw great fires because of the numerous inhabitants; we anchored off the shore since there was no harbor, and because we needed water we sent the small boat ashore with 25 men. The sea along the coast was churned up by enormous waves because of the open beach, and so it was impossible to put anyone ashore without endangering the boat. We saw many people on the beach making various friendly signs, and beckoning us ashore and there I saw a magnificent deed, as Your Majesty will hear.

We sent one of our young sailors swimming ashore to take the people some trinkets, such as little bells, mirrors, an other trifles, and when he came within four fathoms of them, he threw them the goods and tried to turn back, but he was so tossed about by the waves that he was carried up onto the beach half dead. Seeing this, the native people immediately ran up; they took him by the head, the legs, and arms and carried him some distance away. Whereupon the youth, realizing he was being carried away like this, was seized with terror, and began to utter loud cries. They answered him in their language to show him he should not be afraid. Then they placed him on the ground in the sun, at the foot of a small hill, and made gestures of great admiration, looking at the whiteness of his flesh and examining him from head to foot. They took off his shirt and shoes and hose, leaving him naked, then made huge fire next to him, placing him near the heat. When the sailors in the boat saw this, the were filled with terror, as always when something new occurs, and thought the people wanted to roast him for food. After remaining with them for a while, he regained his strength, and showed them by signs that he wanted to return to the ship. With the greatest kindness,
they accompanied him to the sea, holding him close and embracing him; an then to reassure him, they withdrew to a high hill and stood watching him until he was in the boat.

The youth learned the following about these people: they are dark in color like the other tribes, their skin is very glossy, they are of medium height, their faces are more clear-cut, their body and other limbs much more delicate and much less powerful, but they are more quick-witted. He saw nothing else. We left this place [GV footnote: We called it "Annunciata" from the day of arrival, and found there an isthmus one mile wide and about two hundred miles long, in which we could see the eastern sea from the ship, halfway between west and north. This is doubtless the one which goes around the tip of India, China, and Cathay. We sailed along this isthmus, hoping all the time to find some strait or real promontory where the land might end to the north, and we could reach those blessed shores of Cathay. This isthmus was named by the discoverer "Varazanio," just as all the land we found was called "Francesca," after our Francis.]

Still following the coast which veered somewhat to the north, and after fifty leagues we reached another land which seemed much more beautiful and full of great forests. We anchored there, and with 20 men we penetrated about two leagues inland, to find that the people had fled in terror into the forests. Searching everywhere, we met with a very old woman and a young girl of 18 to 20 years, who had hidden in the grass in fear. The old woman had two little girls whom she carried on her shoulders, and clinging to her neck a boy -- they were all about eight years old. The young woman also had three children, but all girls. When we met them, they began to shout. The old woman made signs to us that the men had fled to the woods. We gave her some of our food to eat, which she accepted with great pleasure; the young woman refused everything and threw it angrily to the ground. We took the boy from the old woman to carry back to France, and we wanted to take the young woman, who was very beautiful and tall, but it was impossible to take her to the sea because of the loud cries she uttered. And as we were a long way from the ship and had to pass through several woods, we decided to leave her behind, and took only the boy.

We found these people whiter than the previous ones; they were dressed in certain grasses that hang from the branches of the trees and which they weave with different threads of wild hemp. Their heads are bare and of the same shape as the others. On the whole they live on pulses, which are abundant and different from ours in color and size, but are excellent and have a delicious taste; otherwise they live by hunting fish and birds, which they catch with bows and snares. They make the bows of hard wood, the arrows of reeds, and at the point they put the bones of fish and other animals. The wild animals here are much
more ferocious than in Europe because they are continually being molested by hunters.

We saw many of their little boats made out of a single tree, twenty feet long and four feet wide, which are put together without stone, iron, or any other kind of metal. For in the whole country, in the area of two hundred leagues that we covered, we did not see a single stone of any kind. They use fire and burn the wood as much as necessary to hollow out the boat: they do the same for the stern and the prow so that when it sails it can plow through the waves of the sea.

The land is like the previous one in situation, fertility, and beauty; the woods are sparse; the land is covered with different types of trees, but they are not so fragrant, since there it is more northern and cold. We saw there many vines growing wild, which climb up around the trees as they do in Cisalpine Gaul: they would doubtless produce excellent wines if they were properly cultivated, for several times we found the dry fruit sweet and pleasant, not unlike our own. The people must value them, because wherever they grow, the bushes around them are removed so that the fruit can ripen better. We found wild roses, violets, and lilies, and many kinds of herbs and flowers different from ours. We did not find out about their houses, as they were in the interior of country. We think from the many signs we saw that they are built of wood and grasses; we also think from various conjectures and signs that many of them who sleep in country have nothing but the sky for cover. We learned nothing more of them. We think that all the others of the country we visited earlier live in the same way. After staying here for three days, anchored off the coast, we decided to leave because of the scarcity of port and we continued to follow the coast to the northeast, sailing only during the day and casting anchor at night.[ftnte # 10]

After a hundred leagues we found a very agreeable place between two small but prominent hills; between them a very wide river, deep at its mouth, flow out into the sea; and with the help of the tide, which rises eight feet, any laden ship could have passed from the sea into the river estuary. [almost certainly New York Harbor] Once we were anchored off the coast and well sheltered, we did not want to run any risks without knowing anything about the river mouth. So we took the small boat up this river to land which we found densely populated. The people were almost the same as the others, dressed in birds’ feathers of various color and they came toward us joyfully, uttering loud cries of wonderment, and showing us safest place to beach the boat. We went up this river for about half a league, where we saw that it formed a beautiful lake, about three leagues in circumference. About 30 small boats ran to and from across the lake with innumerable people aboard who were crossing from one side to the other to see us. Suddenly, as often happens in sailing, a violent unfavorable wind blew in from the sea, and we were forced to return to the ship, leaving the land with much
regret on account of its favorable conditions and beauty; we think was not without some properties of value, since all the hills showed signs of minerals.

We weighed anchor, and sailed eastward since the land veered in that direction [along the south shore of Long Island], and covered 80 leagues, always keeping in sight of land. We discovered a triangular-shaped island, ten leagues from the mainland, similar in size to the island of Rhodes [likely Block Island]; it was full of hills, covered in trees, and highly populated to judge by the fires we saw burning continually along the shore. We baptized it in the name of your illustrious mother, but did not anchor there because the weather was unfavorable.

We reached another land 15 leagues from the island, where we found an excellent harbor [in almost certainly Newport in lower Narragansett Bay]; before entering it, we saw about boats full of people who came around the ship uttering various cries of wonderment. They did not come nearer than fifty paces but stopped to look at the structure of our ship, our persons, and our clothes; then all together they raised a loud cry which meant that they were joyful. We reassured them somewhat by imitating their gestures, and they came near enough for us to throw them a few little bells and mirrors and many trinkets, which they took and looked at, laughing, and then they confidently came on board ship. Among them were two kings, who were as beautiful of stature and build as I can possibly describe. The first was about 40 years old, the other a young man of 24, and they were dressed thus: the older man had on his naked body a stag skin, skillfully worked like damask with various embroideries; the head was bare, the hair tied back with various bands, and around the neck hung a wide chain decorated with many different-colored stones. The young man was dressed in almost the same way. These people are the most beautiful and have the most civil customs that we have found on this voyage. They are taller than we are; they are a bronze color, some tending more toward whiteness, others to a tawny color; the face is clear-cut; the hair is long and black, and they take great pains to decorate it; the eyes are black and alert, and their manner is sweet and gentle, very like the manner of the ancients I shall not speak to Your Majesty of the other parts of the body, since they have all the proportions belonging to any well-built man.

Their women are just as shapely and beautiful; very gracious, of attractive manner and pleasant appearance; their customs and behavior follow womanly custom as far as befits human nature; they go nude except for stag skin embroidered like the men's, and some wear rich lynx skins on their arms; their bare heads are decorated with various ornaments made of braids of their own hair which hang down over their breasts on either side. Some have other hair arrangements such as the women of Egypt and Syria wear, and these women are older and have been joined in wedlock. Both men and women have various trinkets hanging from their ears as the Orientals do; and we saw that they had many sheets of worked copper which they prize more than gold. They do not...
value gold because of its color; they think it the most worthless of all, and rate blue and red above all other colors. The things we gave them that they prized the most were little bells, blue crystals, and other trinkets to put in the ear or around the neck. They did not appreciate cloth of silk and gold, nor even of any other kind, nor did they care to have them; the same was true for metals like steel and iron, for many times when we showed them some of our arms, they did not admire them, nor ask for them, but merely examined the workmanship. They did the same with mirrors; they would look at them quickly, and then refuse them, laughing.

They are very generous and give away all they have. We made great friends with them, and one day before we entered the harbor with the ship, when we were lying at anchor one league out to sea because of unfavorable weather, they came out to the ship with a great number of their boats; they had painted and decorated their faces with various colors, showing us that it was a sign of happiness. They brought us some of their food, and showed us by signs where we should anchor in the port for the ship’s safety, and then accompanied us all the way until we dropped anchor.

We stayed there for 15 days, taking advantage of the place to refresh ourselves. Every day the people came to see us on the ship, bringing their womenfolk. They are very careful with them, for when they come aboard and stay a long time, they make the women wait in the boats; and however many entreaties we made or offers of various gifts, we could no persuade them to let the women come on board ship. One of the two kings often came with the queen and many attendants for the pleasure of seeing us, and at first they always stopped on a piece of ground about two hundred paces away from us, and sent a boat to warn us of their arrival, saying they wanted to come and see the ship: they did this as a kind of precaution. And once they had a reply from us, they came immediately, and watched us for a while; but when they heard the irksome clamor of the crowd of sailors, they sent the queen and her maidens in a light little boat to wait on a small island about a quarter of a league from us. The king remained a long while, discussing by signs and gestures various fanciful notions, looking at all the ship’s equipment, and asking especially about its uses; he imitated our manners, tasted our food, and then courteously took his leave of us. Sometimes when our men stayed on a small island near the ship for two or three days for their various needs, as is the custom of sailors, he would come with seven or eight of his attendants, watch our operations, and often ask us if we wanted to stay there any length of time, offering us all his help. Then he would shoot his bow and run and perform various games with his men to give us pleasure.

We frequently went five to six leagues into the interior, and found it as pleasant as I can possibly describe, and suitable for every kind of cultivation-grain, wine, or oil. For there the fields extend for 25 to 30 leagues; they are open and free of
any obstacles or trees, and so fertile that any kind of seed would produce excellent crops. Then we entered the forests, which could be penetrated even by a large army; the trees there are oaks, cypresses, and others unknown in our Europe. We found Lucullian apples, plums, and filberts, and many kinds of fruit different from ours. There is an enormous number of animals-stags, deer, lynx, and other species; these people, like the others, capture them with snares and bows, which are their principal weapons. Their arrows are worked with great beauty, and they tip them not with iron but with emery, jasper, hard marble, and other sharp stones. They use the same kind of stone instead of iron for cutting trees, and make their little boats with a single log of wood, hollowed out with admirable skill; there is ample room in them for fourteen to xv men; they operate a short oar, broad at the end, with only the strength of their arms, and they go to sea without any danger, and as swiftly as they please. When we went farther inland we saw their houses, which are circular in shape, about 14 to 15 paces across, made of bent saplings; they are arranged without any architectural pattern, and are covered with cleverly worked mats of straw which protect them from wind and rain. There is no doubt that if they had the skilled workmen that we have, they would erect great buildings, for the whole maritime coast is full of various blue rocks, crystals, and alabaster, and for such a purpose it has an abundance of ports and shelter for ships.

They move these houses from one place to another according to the richness of the site and the season. They need only carry the straw mats, and so they have new houses made in no time at all. In each house there lives a father with a very large family, for in some we saw 25 to 30 people. They live on the same food as the other people—pulse (which they produce with more systematic cultivation than the other tribes, and when sowing they observe the influence of the moon, the rising of the Pleiades, and many other customs derived from the ancients), and otherwise on game and fish. They live a long time, and rarely fall sick; if they are wounded, they cure themselves with fire without medicine; their end comes with old age. We consider them very compassionate and charitable toward their relatives, for they make great lamentations in times of adversity, recalling in their grief all their past happiness. At the end of their life, the relatives perform together the Sicilian lament, which is mingled with singing and lasts a long time. This is all that we could learn of them.

This country is situated on a parallel with Rome at 40 2/3s degrees, but is somewhat colder, by chance and not by nature, as I shall explain to Your Majesty at another point; I will now describe the position of the aforementioned port. The coast of this land runs from west to east. The harbor mouth [GV footnote: which we called “refugio” because of its beauty] faces south, and is half a league wide; from its entrance it extends for 12 leagues in a northeasterly direction, and then widens out to form a large bay of about 20 leagues in circumference. In this bay there are five small islands, very fertile and beautiful, full of tall spreading trees,
and any large fleet could ride safely among them without fear of tempest or other dangers. Then, going southward to the entrance of the harbor, there are very pleasant hills on either side, with many streams of clear water flowing from the high land into the sea. In the middle of this estuary there is a rock of "viva pietra" [a nonporous rock] formed by nature, which is suitable for building any kind of machine or bulwark for the defense of the harbor. [GV footnote: which we called "La Petra Viva," on account of both the nature of the stone and the family of a gentlewoman; on the right side of the harbor mouth there is a promontory which we call "Jovius promontory].

Having supplied all our needs, we left this port on the sixth day of May and continued along the coast, never losing sight of land.[Likely along the southern coast of Cape Cod, first past Martha’s Vineyard and then Nantucket] We sailed one hundred and fifty leagues [GV footnote: within this distance we found sandbanks which stretch from the continent fifty leagues out to sea. Over them the water was never less than three feet deep; thus there is great danger in sailing there. We crossed them with difficulty and called them "Armellini"] and found the land similar in nature, but somewhat higher, with several mountains which all showed signs of minerals. We did not land there because the weather was favorable and helped us in sailing along the coast: we think it resembles the other. The shore ran eastward. At a distance of fifty leagues, keeping more to the north, we found high country full of very dense forests, composed of pines, cypresses, and similar trees which grow in cold regions. [This is likely along the coast of southern Maine.]

The people were quite different from the others, for while the previous ones had been courteous in manner, these were full of crudity and vices, and were so barbarous that we could never make any communication with them, however many signs we made to them. They were clothed in skins of bear, lynx, sea-wolf and other animals. As far as we could judge from several visits to their houses, we think they live on game, fish, and several fruits which are a species of root which the earth produces itself. They have no pulse, and we saw no sign of cultivation, nor would the land be suitable for producing any fruit or grain on account of its sterility. If we wanted to trade with them for some of their things, they would come to the seashore on some rocks where the breakers were most violent, while we remained in the little boat, and they sent us what they wanted to give on a rope, continually shouting to us not to approach the land; they gave us the barter quickly, and would take in exchange only knives, hooks for fishing and sharp metal. We found no courtesy in them, and when we had nothing more to exchange and left them, the men made all the signs of scorn and shame that any brute creature would make [GV footnote: such as showing their buttocks and laughing.] Against their wishes, we penetrated two or three leagues inland with 25 armed men, and when we disembarked on the shore, they shot at us with their bows and uttered loud cries before fleeing into the woods. We did not find
anything of great value in this land, except for the vast forests and some hills which could contain some metal: for we saw many natives with "paternostri" beads of copper in their ears.

We departed, skirting the coast in a northeasterly direction; we found the country more beautiful, open and bare of trees, with high mountains in the interior which slope down toward the seashore. In fifty leagues we discovered 32 islands, [GV footnote: we are in 43 2/3 [degrees] all near the continent: they were small and pleasant in appearance, but high, and followed the curve of the land; some beautiful ports and channels were formed between them, such as those formed in the Adriatic Gulf in Illyria and Dalmatia. We made no contact with the people and we think they were, like the others, devoid of manners and humanity. After sailing 150 leagues in a northeasterly direction we approached the land which the Britons once found, which lies in 50 degrees; and since we had exhausted all our naval stores and provisions, and had discovered seven hundred leagues or more of new land, we took on supplies of water and wood, and decided to return to France.

Due to the lack of [a common] language, we were unable to find out by signs or gestures how much religious faith these people we found possess. We think they have neither religion nor laws, that they do not know of a First Cause or Author, that they do not worship the sky, the stars, the sun, the moon, or other planets, nor do they even practice any kind of idolatry; we do not know whether they offer any sacrifices or other prayers, nor are there any temples or churches of prayer among their peoples. We consider that they have no religion and that they live in absolute freedom, and that everything they do proceeds from Ignorance; for they are very easily persuaded, and they imitated everything that they saw us Christians do with regard to divine worship, with the same fervor and enthusiasm that we had.

It remains for me to tell Your Majesty of the progress of this voyage as regards Cosmography. As I said earlier, we departed from the aforementioned rocks which lie at the limit of the Occident as the ancients knew it, and in the meridian of the Fortunate Islands, at a latitude Of 32 degrees north from the Equator in our hemisphere, we sailed westward until we first found land at 1200 leagues—which is equal to 4800 miles, counting four miles to a league in accordance with the maritime practice of naval experts: geometrically, according to the ratio of three plus 1 1/2 times one seventh [3’ 3/14] of the diameter to the circumference, that is, 92 54164/47233 degrees. This is correct. For, since the chord [diameter] of an arc of the greatest circle is 114 6/11 degrees, and the chord [diameter] of the parallel of 34 degrees where we first found land, according to the same ratio, is 95 233/450 degrees, then the circumference of the whole circle is 300 713/1575 degrees; allowing 62 1/2 miles for each degree* (which most of those who have experimented confirm as the distance on earth corresponding to the proportion of

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(the sky), this should give us 188759 31/126 miles, divided into 36o parts, which would come to 52 989/9072 miles each. And this is the length of a degree of longitude in the said parallel [of latitude] of 34 degrees; on the basis of this we calculated our departure by taking a straight line from the meridian of the aforesaid rocks which lie in latitude 32 degrees. Using these 1200 leagues on a straight line in an east-west direction in 34 degrees [of latitude], we found therefore that this amounts to 92 54164/472773 degrees, and so we have navigated in this parallel of 34 degrees this much farther to the westward than was ever known to the ancients.**

[Editor's footnote: ** Verrazzano's reference to the number of "degrees" in the "chord," etc., is confusing to one who does not understand what he means. In plain language, his argument is as follows, using his figures but changing his words: If a great circle, such as the equator, be divided into 36o parts, each part will contain 62 1/2 miles. If there are 36o such parts in the circumference of the circle, then, according to the ratio of circumference to diameter, 3 3/14 to 1, there are in the diameter only 114 6/11 such parts of 62 1/2 miles each. (He uses the word "chord" for diameter.) Now, if the diameter of a great circle contains 114 6/11 such parts, the diameter of a circle lying in the plane of 34' of latitude will contain only 95 233/450 such parts, and multiplying that diameter by 3 1/7, he finds the circumference of a circle in 34' of latitude to contain 300 713/1575 such parts of 62 1/2, miles each. The last two figures multiplied together give him 18,759 31/126 miles in the circumference of the circle in 34'. Then dividing 18,759 31/126 into 36o equal parts or degrees, he finds that a degree of longitude at the height of 34' of latitude measures 52 989/9072 0 miles. As he estimated that he had sailed westward 1,200 leagues or 4,800 miles in that latitude, he divides 4,800 by 52 989/9072 and finds that he sailed through 92 54164/472773 degrees of longitude. That is the substance of his method, although his fractions are not always accurate.-E. H. H.]

This longitudinal distance was known to us by navigating with various instruments (but without observing lunar eclipses or other phenomena), by the motion of the sun (always taking the altitude at whatever hour we wished) [and] by the distance the ship ran on the various courses; thus we found the distance between one meridian and another geometrically. I have noted all this fully in a little book, together with the rising of the tide in all the regions in every season and at every time of day, which I think would prove rather useful to navigators. I hope to discuss the matter with Your Majesty with a view to promoting science.

My intention on this voyage was to reach Cathay and the extreme eastern coast of Asia, but I did not expect to find such an obstacle of new land as I have found; and if for some reason I did expect to find it, I estimated there would be some strait to get through to the Eastern Ocean. This was the opinion of all the ancients, who certainly believed that our Western Ocean was joined to the
Eastern Ocean of India without any land in between. Aristotle supports this theory by arguments of various analogies, but this opinion is quite contrary to that of the moderns, and has been proven false by experience. Nevertheless, land has been found by modern man which was unknown to the ancients, another world with respect to the one they knew, which appears to be larger than our Europe, than Africa, and almost larger than Asia, if we estimate its size correctly; I shall give Your Majesty a concise account of it.

Beyond the Equator, at 20 32060/4781 [32060/46781?] degrees westward from the Fortunate Islands, the Spaniard [Magellan] sailed to 54 degrees south where they found land without end. They then turned to the north along the same meridian and followed the coast as far as 8 degrees. They have sailed to 89 2970/46781 degrees, which added to the 20 32060/46781 degrees makes 110 44830/46783 degrees. So they have sailed this far westward from the aforementioned meridian of the Fortunate Islands in the parallel of 21 degrees of latitude. We have not measured this distance as we have not made this particular voyage; it could vary a little one way or the other. We have calculated it "geometrically" from the reports of many naval experts who have made the voyage—who assert it to be 1600 leagues, to judge the ship’s course arbitrarily and to allow for the ship’s deviation from its straight course according to strength of the wind. I hope we shall soon be absolutely certain about these facts.

On the other hand, on this voyage we made by order of Your Majesty, in addition to the degrees etc. that we sailed from the said meridian to the west of the first land we found 34 degrees, we sailed 300 leagues northeastern, and almost 400 leagues to the east, following the coast until we reached 54 degrees; we then left the land which the Lusitania [Portuguese] found long ago and which they followed northward as far as the Arctic Circle without finding an end to it. So if we add the northerly latitude to the southern -- that is, 54 degrees to 66 degrees -- we have 120 degrees, which is more than latitude covered by Africa and Europe: for from the northernmost point of Europe, form by the limits of Norway at 71 degrees, to the tip of Africa, which is the Cape of Good Hope at 35 degrees, there are only 106 degrees; and if the territorial area of this [new] land corresponds in size to its maritime shore, there is no doubt that it is larger than Asia. In this way we find that the extension of the land is much greater than the ancients believed, a contrary to the Mathematicians who considered that there was less land than water, have proven it by experience to be the reverse.

And as for the corporeal volume, we judge that there cannot be less land than water, I hope to establish to Your Majesty at a better time by more reasoned and tried argumen All this land or New World which we have described above is joined together, but is not linked with Asia or Africa (we know this for certain), but could be joined to Europe Norway or Russia; this would be false according to the ancients, who declare that almost all the north has been navigated from the
promontory of the Cimbri to the Orient, and affirm that they went around as far as
the Caspian Sea itself. Therefore the continent would lie between two seas, to
the east and west; but these two seas do not in fact surround either of the two
continents, for beyond 54 degrees south from the Equator the New World tends
eastward for a great distance, and to the north of the Equator it passes 66
degrees and continues eastward as far as 70 degrees. I hope that with Your
Majesty’s help we shall have more certain knowledge of this; may God Almighty
prosper you in everlasting glory, that we may see the perfect end to our
cosmography, and that the sacred word of gospel may be fulfilled: "their sound
has gone out into every land."

In the ship **Dauphine** on the 8th day of July, 1524

Humble servant Janus Verazanus

To Leonardo Tedaldi or to Thomaso Sartini@ merchants in Lyons. To be
forwarded to Bonacorso Ruscella