

# Antonio de Ulloa, the *Délivrance*, and the Royal Society

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IN 1745 BRITISH NAVAL OFFICERS captured Antonio de Ulloa at Louisbourg as he was returning in the French ship *Délivrance* from South America, where he and his colleague Jorge Juan y Santacilia, both naval lieutenants and scientists, had spent several years working with a team of French scientists.<sup>1</sup> These men, headed by Charles de la Condamine, had been sent by the Académie des Sciences of Paris, and both groups had been trying to determine the exact measurement of a degree of latitude at the equator. The story had a happy ending when the British government returned to Ulloa the mass of papers captured with him and let him return to Spain after his papers had been examined by the Royal Society, which gave him a cordial reception and made him a Fellow.<sup>2</sup> The Spanish historian Antonio Ballesteros y Beretta has suggested that at this time the British acquired the manuscript of the confidential report on conditions in Peru, written by Ulloa and Jorge Juan and published in London some eighty years later in a garbled form as *Noticias secretas de América*. This seems unlikely since, according to the available evidence, there was never any such report among the papers captured with Ulloa, and in any case when the British authorities released him, they returned all his papers to him and held back nothing.<sup>3</sup>

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<sup>1</sup> The present article draws upon manuscript sources in the British Record Office, the Royal Society of London, and the Archivo General de Indias in Seville to amplify my brief account published some thirty years ago describing Antonio de Ulloa's visit to London as a prisoner of war in 1745-1746 and his relations with the Royal Society at that time. See Arthur P. Whitaker, "Antonio de Ulloa," *HAHR*, XV (May 1935), 155-194. This article has been republished in Lewis Hanke (ed.), *Readings in Latin American History* (2 vols., New York, 1966), I, 257-276.

<sup>2</sup> Whitaker, "Antonio de Ulloa," 164-166.

<sup>3</sup> *Ibid.*, 167, footnote 30. I have shown elsewhere that Ulloa was probably the principal if not the sole author of the secret report, and that the report was for

Besides confirming this conclusion with additional evidence, the present article gives for the first time the British side of the story of Ulloa's sojourn in England and helps to explain why he was treated with the exceptional generosity which he acknowledged in print soon after his return to Spain.<sup>4</sup> To be sure, generosity toward a defeated enemy was common in the Europe of that era, at least when the enemy was an officer and a gentleman, as Ulloa was. It will be evident that he also had a special claim to it as a scientist fresh from an important but obscure investigation in a strange country, almost unknown to the British.

An interesting feature of the story is the explanation of why Ulloa was returning from Spain's American dominions in a French ship when he was captured. For a Spanish official to travel between these two parts of the empire under a foreign flag was by no means unheard of in the eighteenth century, but it was rare except in very special circumstances, if only because, as a rule, foreign ships were excluded from Spanish American ports. To be sure, smuggling was rife there, but a Spanish official could hardly take passage in a smuggler.

The ironical name of the French ship in which Ulloa was captured by the British, *La Délivrance*, was a common abbreviation of its full name *Notre Dame de la Délivrance*. Various circumstances combine to explain why he sailed in it, and Jorge Juan in another French ship, *Le Lys*, as they did from Callao, the port of Lima, Peru, on October 22, 1744. Most important of all, communications between Spain and her oversea dominions had been disrupted since 1739 by a war that began as a duel between Spain and Great Britain. It later merged into the general European conflict known as the War of the Austrian Succession, but France and England remained technically at peace with each other until 1744, and the neutral French flag was useful to the Spaniards in relieving the shipping shortage from which they suffered on both sides of the Atlantic.

By 1744 Ulloa and Jorge Juan had completed their scientific labors and certain military assignments given them by the viceroy of Peru, Marqués de Villa García, and were ready to leave for home. At that time two French merchant ships, the *Délivrance* and the *Lys*, were preparing to sail from Callao for Spain. It is not surprising that the two young Spaniards seized this opportunity to return to

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the most part reproduced faithfully in the notorious *Noticias secretas*; but these problems do not come within the scope of the present paper.

<sup>4</sup> Jorge Juan and Antonio de Ulloa, *Relación histórica del viage a la América meridional* (4 vols., Madrid, 1748), IV, 539-541.

Spain under (as they thought) a neutral flag, or that the viceroy consented. But why had Spain granted the French the rare privilege of trading with Peru at this time? So far as the Spanish records show, the answer lies wholly in the wartime shipping shortage. Other factors such as favoritism, bribery, and French influence at the Spanish court may have played a part, but they have left no trace even in the protests by opponents of the measure, who based their opposition on other grounds.

The complicated history of this concession can only be sketched in outline here. In 1740 the Minister of Hacienda, José del Campillo, had supported a proposal that licenses be granted to one or two ships (nationality not specified) to sail to the South Sea (i.e., Peru) in order to make up for the shortage of goods in Peru and Chile and help defend the area against the English. For a time the project was stymied by opposition from the powerful merchants' guild in Cádiz. Asked to arrange for the expedition, the president of the Casa de Contratación in Cádiz told Campillo that because of bitter resentment there he would not proceed without direct orders from the king. Campillo gave ground briefly, for at that very time the court was trying to obtain a war loan of one million pesos from these same merchants. The loan was negotiated before the end of the year, and one of its conditions was that no licenses for the South Sea should be issued until the loan had been repaid.<sup>5</sup>

Once the money was in hand, however, Campillo returned to the charge, this time in the name of the king. In August 1741 he ordered that a license of this kind be issued to Juan Clemente de Olave and José de Guisasola, identified as *vecinos* of the city of Cádiz and thenceforth referred to as the *fletadores* (charterers). The license authorized them to send one or two ships to the South Sea with a total cargo of six hundred tons of goods and to sell these in the ports of Chile and Peru. For this privilege, Campillo said, they had already paid a fee (*servicio*) of 253,000 pesos, and he directed that they be given every facility for the prompt preparation and sailing of the ships.<sup>6</sup>

Although Olave and Guisasola were residents of Cádiz, the chief merchants of the community opposed them and appealed to the king

<sup>5</sup> This paragraph summarizes the correspondence between Campillo and the president of the Casa de Contratación, Francisco de Varas y Valdés, and related documents in the Archivo General de Indias, Audiencia de Lima, legajo 1521, "Licencias para el Mar del Sur." Hereafter cited as AGI, Lima.

<sup>6</sup> *Ibid.*, José del Campillo to José de la Quintana, Minister of Indias y Marina, August 3, 1721, draft. In the *consulta* cited in note 11 the amount of the *servicio* is given as 153,000 pesos.

to revoke the order. Representations were sent at once to Madrid by the Casa de Contratación, the consulado of Cádiz, and Lima's *diputado del comercio* in Cádiz. The first reason for their protest was the government's promise not to grant any such license until the recent loan had been repaid, which had not been done. The other was the allegation that merchants in both Spain and Lima would be ruined if the license in question were not revoked. The Lima merchants, they said, had not yet been able to dispose of the goods which they had bought in 1740 at the Portobelo fair. These had been transported to Lima by land and hence could not be sold as cheaply as goods brought by the less expensive all-water route around Cape Horn which the ships of Olave and Guisasaola would follow. While the immediate impact of this unfair competition would fall on the merchants of Lima, their ruin, it was claimed, would inflict heavy losses on the Cádiz merchants as well.<sup>7</sup>

Their protests were to no avail. On September 28, 1741, Campillo informed the appropriate minister, without explanation, that although the representations in question had been laid before the king, "ha resuelto S[u] M[ajestad] no obstante ellas, que tenga efecto el permiso." So the license was duly issued, and the number of ships covered by it soon increased from two to three, with a consequent increase in tonnage from six hundred to slightly more than seven hundred. The first two ships chosen were the French frigates known to the Spaniards as *Deliveranza* (*Délivrance*) and *Luis Erasmus*, which had a combined capacity of only 516 tons. A royal order of November 14, 1741 made up the difference by adding a third French ship, the *Lis* (*Lys*) of two hundred tons, described as a *navío*. This was done to provide transportation to Montevideo for the new governor of Buenos Aires and military supplies for his province.<sup>8</sup>

The poverty of Spain's maritime resources on the west coast of South America at this time was revealed by a report on the naval situation there written by Viceroy Villa García in August 1744, five years after the beginning of the war with England and two months before Ulloa and Jorge Juan sailed from Callao for Spain in the French ships.<sup>9</sup> The report has added interest for us because it contains references to the viceroy's employment of these two young officers for naval purposes in the course of their scientific expedition to South America.

<sup>7</sup> AGI, Lima, leg. 1521.

<sup>8</sup> *Ibid.*, José del Campillo to Francisco de Varas, president of the Casa de Contratación, November 14, 1741, draft.

<sup>9</sup> *Ibid.*, leg. 1489, Viceroy Villa García to the king, Lima, August 29, 1744, duplicate.

The report in question began by acknowledging receipt of an order from the court to construct in the shipyards of Peru two sixty-gun warships, which were to be sent to Spain after the conclusion of peace, with cargoes of cacao and other products of the country and then incorporated into the royal navy. The viceroy went on to describe the naval forces currently available for the defense of the west coast of South America in the following terms. Of the four warships nominally available, only one, the frigate *Esperanza*, was fit for active service. Of the other three, the *Sacramento* had been condemned as totally useless after inspections conducted for the viceroy, first by "the *tenientes de navío* Don Jorge Juan and Don Antonio de Ulloa," and then by the squadron commander and his most expert officers, who found that the much-needed repairs would cost more than the construction of a new ship. The *Concepción* was in much the same condition, and the *San Fermín*, which was not of the best construction and carried only forty guns, was currently undergoing necessary repairs. To bolster up his pitifully weak naval force, the viceroy had been eager to transfer the warship *Asia* from Buenos Aires to Peru, but had had to desist because of the impossibility of equipping it with proper masts for the passage around Cape Horn.

This failure threw him back on his own resources, but he was undecided whether to build an entirely new warship or to use whatever parts could be salvaged from the *Sacramento*. He suspended action, therefore, pending the preparation of a cost estimate by "the said Jorge Juan." In any case, the viceroy promised, he would somehow arrange for the construction of two warships as instructed or at least one, unless prevented by orders to remit money to Spain or by some other top-priority demand on his available funds. Considering all the circumstances, one can easily understand why the Spanish government used ships flying the neutral flag of France to maintain its tenuous ties with Peru.

La Condamine's statement that the Spanish government sent the *Lys* and the *Délivrance* to Peru to bring back two million pesos from Callao is not borne out by the Spanish records.<sup>10</sup> According to the latter this was essentially a commercial transaction. As finally worded, the license authorized the *fletadores*, through their agents, the ships' captains, to sell their cargoes freely along the whole coast of South America from Concepción to Callao and with part of the proceeds to purchase "cacao, cascarilla, vicuña wool, and other products of the country (*reino*)." They were to convert the remainder

<sup>10</sup> Charles de la Condamine, *Journal du voyage fait par l'ordre du Roi à l'Equateur* (Paris, 1751), 212.

into specie or wrought silver and bring all of the goods back to Spain.

Both the contract for the voyage, signed at Cádiz on March 3, 1742, and the sailing instructions given them by the Casa de Contratación prohibited the French ships from touching at any foreign port on either the outward or the homeward voyage. The prohibition was reinforced while they were on the coast of Peru, for before the viceroy would permit the *Délivrance* and the *Lys* to start on the return trip, he required their captains to give bond to return directly to Spain without entering any foreign port on the way.<sup>11</sup> The prohibition was not due to the outbreak of war between France and England, for this information was not yet known in Peru, and the viceroy reported with evident satisfaction that Juan and Ulloa were traveling home under a neutral flag.<sup>12</sup>

The two French ships started the return trip together from Callao on October 22, 1744, but violated this prohibition after separating at Valparaíso. Perhaps from sentiment or because they wanted the protection of the French navy their captains did call at French ports on the way back.<sup>13</sup> The ports were as far apart as the results were different. The captain of the *Lys*, with Jorge Juan aboard, touched first at French Martinique and then at Guarico (Cap Français) in French St. Domingue. From the latter, with a French convoy of forty-eight merchantmen and five warships he made it safely home in October 1745, not to a Spanish port but to Brest. On the way, he passed within three or four leagues of El Ferrol, a Spanish naval base, but he refused to put in despite the urging of his Spanish passengers.<sup>14</sup> On the other hand, the *Délivrance*, after calling at the Portuguese island of Fernando de Noronha and Cap Français, narrowly escaped capture by British corsairs in late July 1745 and sailed unsuspectingly into the strongly fortified French port of Louisbourg on Cape Breton Island on August 13, only to learn too late that the "Gibraltar of the New World" had just been captured for England by a force of New England colonials and two British warships. So

<sup>11</sup> This paragraph is based on a forty-page *consulta* of the Council of the Indies, endorsed on the cover: "De parte/a 21 de octubre de 1746/Acor [dó].<sup>se</sup> 16 de sep.<sup>re</sup>," AGI, Lima, leg. 351. This legajo contains several other *consultas* on the case of the *Lys*.

<sup>12</sup> Even so, he took the precaution of ordering Ulloa to throw overboard, if threatened with capture, the charts of the port of Callao and the neighboring coast which Ulloa had prepared under the viceroy's orders. *Ibid.*, leg. 1489, Marqués de Villa García to the king, Lima, November 4, 1744.

<sup>13</sup> In the Spanish records the captain of the *Lys* appears as Jacobo Duguen or Dugen and the captain of the *Délivrance* as Laiton or Layton.

<sup>14</sup> Jorge Juan reported the affair to the court from Brest in a letter dated October 31, 1745, *consulta* cited in footnote 11.

it was that Ulloa became a prisoner of war.<sup>15</sup> The Council of the Indies duly heard the cases of both ships and on January 12, 1746 ordered that their captains should be arrested and their property embargoed as soon as they entered any Spanish port.<sup>16</sup> No evidence has been found that either captain was ever foolish enough to do so, but in any case they pass out of our story at this point.

On October 19, 1745, the British frigate *Sunderland*, under the command of Captain John Brett, sailed from Louisbourg for England with Ulloa and his captured papers aboard. No inventory of his papers has been found,<sup>17</sup> but they filled about 720 sheets of paper and consisted mainly of his journal of the scientific expeditions and some *noticias históricas*.<sup>18</sup> He was held in England until early May 1746 but was treated with exceptional consideration throughout his stay. Ulloa was an officer, gentleman, and scientist. In addition, other factors favored his good treatment: the innocuous character of the papers captured with him; the "civility" which he had shown a British naval captain, David Cheap,<sup>19</sup> while in Peru; the good offices of two noble lords in high office, the Earls of Harrington and Sandwich, and two "considerable" London merchants; and finally, the respect shown him by the Royal Society.

The *Sunderland* reached England on December 22, 1745. Ulloa's preferential status is indicated by a letter written four days later, which contains the first reference to him found in the British archives. This was the Admiralty's reply to a letter from the Commissioners

<sup>15</sup> Ulloa's account of the capture of the *Délivrance* is given in *Relación histórica*, IV, 445-447; his detailed but scattered account of her voyage and that of the *Lys* from Callao fills most of this volume.

<sup>16</sup> *Consulta*, cited in footnote 11.

<sup>17</sup> Just after his return to Madrid Ulloa did provide the court with an inventory, dated August 2, 1746, listing the notes and papers which he and Jorge Juan had brought back from South America, but it does not show which were his and which were Jorge Juan's. According to Ulloa's statement in *Relación histórica*, IV, 448-449, at the time of his capture he threw overboard all the *pliegos* entrusted to him by the viceroy and other papers but kept all his records of the scientific expedition and his *noticias históricas*. He specified, however, that he had thrown overboard a "description of the civil and political government" of the parts of South America which he visited, and this may have contained the same kind of material as the subsequent *Noticias secretas*. See my article, "Some Remarks on the *Noticias secretas de América*," in *Proceedings of the First Convention of the Inter-American Bibliographical and Library Association* (New York, 1938), 225.

<sup>18</sup> This information comes from the report, cited below, by President Martin Folkes of the Royal Society, who inspected Ulloa's papers more carefully than anyone else and from Ulloa's statement in *Relación histórica*, IV, 448-449.

<sup>19</sup> According to Ulloa, *Relación histórica*, IV, 477-481, Cheap had commanded a frigate in Anson's squadron wrecked in the Pacific and returned from Peru in the *Lys*.

for Sick and Wounded at Portsmouth transmitting the request of the prisoners just “brought home” from Louisbourg in the *Sunderland* that they be permitted to remain at nearby Fareham rather than be removed to Waltham as had been planned. All the prisoners except Ulloa were described by the commissioners as “inhabitants of Louisbourg.” In reply, the Admiralty said the prisoners might remain at Fareham “ ’till you have an opportunity of sending them home.” It continued: “And whereas Capt. Brett has acquainted us, that among the said prisoners there is one Mr. Ulloa a lieutenant in the Spanish Navy, who bears the character of a very ingenious man, and was very Civil in the Kingdom of Peru to Captain Cheap, you are to give him his Parole at Fareham, and cause him to be treated with all possible Civility, and send him home by the first opportunity.”<sup>20</sup>

Ulloa owed this favor in part to the Earl of Harrington, first secretary of state for the northern department and a member of the Royal Society. From 1720 to 1729 he had been ambassador to Spain, where he had formed a lasting affection for its people. Accordingly, says Ulloa: “When I first presented myself at the office or commissariat of prisoners of war, I found an order from the Earl of Harrington . . . to come and see him.” This he did, and in their conversation the earl promised to support in any way possible the young Spaniard’s efforts to recover his papers, which would entail a trip to London. For three months, however, the trip was delayed, for just at that time the second Jacobite rebellion had provoked a fresh outburst of anti-Catholic feeling in England; since Ulloa was, of course, a Catholic, it seemed prudent to wait until passions had cooled.<sup>21</sup>

On March 22, 1746, Harrington wrote to the Lords of the Admiralty:<sup>22</sup>

I send you herewith the enclosed Paper Containing the Request of Don Antonio de Ulloa, a Spanish Lieutenant, who is a Prisoner now at Fareham near Portsmouth, for Leave to come to Town, & it is His Majesty’s Pleasure, that your Lordships should give the necessary Orders to the Commissioners for the Sick & Wounded, that what the said Gentleman therein desires may accordingly be complied with.

The request referred to is a two-page document, written in English in the third person. It opens with the statement that Ulloa, “Lieutenant of the Spanish Man of War, was sent about ten years since in quality of one of the King of Spain’s Mathematicians, to attend and

<sup>20</sup> British Public Record Office, Admiralty Out-Letters (ADM 2), Vol. 65, f. 538. Hereafter cited as BPRO.

<sup>21</sup>Ulloa, *Relación histórica*, IV, 538-540.

<sup>22</sup> BPRO, Admiralty In-Letters (ADM 1), Vol. 4116, f. 44.



assist the French Astronomers sent about that time to measure a degree of latitude under the Equator . . . and had been constantly with them ever since" until he was captured returning to Europe.<sup>23</sup> The request continued:<sup>24</sup>

Upon application to the Commissioners for the sick and wounded they are willing to let him [Ulloa] return home upon his parole, but cannot without leave of a Secretary of State permit him to come up to London where he wants to enquire after his papers relating to his private affairs and the observations he had been present at [,] which [papers] he hopes to obtain after the same shall have been examined and found no ways relative to the public. He is ready to undergo an examination, and 2 considerable merchants in London will be answerable for his appearance whenever required.

His petition granted, Ulloa lost no time in going to London. There, he tells us, he was from the start cultivated (*cortejado*) and aided in his quest by Martin Folkes. The precious papers had been turned over to the East India Company, but Folkes arranged with the Earl of Sandwich, one of the Lords of the Admiralty, to have that office recover and transmit them to Folkes for examination. The latter part of the arrangement was formalized in an Admiralty letter dated April 23, 1746. It reads:<sup>25</sup>

Signor Ulloa, an officer in the Spanish service and sent by that Court to Chili in the South Sea, to make Mathematical Observations, being taken on his return home . . . and several of his Papers being in the possession of the Lords Comm[issione]rs of the Adm[iral]ty, I trouble you with them, by direction of the Earl of Sandwich agreeable to the Consent you have given his Lordship to send them to you, that you may peruse them at your convenient leisure, and judge whether there be any thing in them worth Preservation, and being communicated to the World. If you want a Spanish interpreter, or Signor Ulloa himself, who is in town, you will please to let me know it, and either or both will be ordered to attend you.

Folkes and his fellow members of the Royal Society already knew enough about the recent progress of Spanish science and the expedition to Quito to be keenly interested in Ulloa's papers. In 1738 the Society had received an account of the recent founding of the Royal Academy of Madrid, translated from the Spanish by one of its members. This described the new body in terms likely to appeal to any

<sup>23</sup> This was not true. Ulloa and Jorge Juan had spent a large part of the time since 1740 apart from the French scientists and had devoted most of it to strengthening the defenses of Peru against English attack. In the course of their mission the two Spaniards rejected the French definition of their role, claiming that the king had sent them not merely to assist the French, but to work as equals with them.

<sup>24</sup> This enclosure is with the covering letter cited above in footnote 22.

<sup>25</sup> BPRO, Admiralty Out-Letters (ADM 2), Vol. 497, f. 322, pp. 157-158.

member of what it called “the older academies of Europe,” such as the Royal Society. To begin with, said the account, the Spanish Academy proposed to follow the example of its elders by seeking “to bring the art of the Physick in Spain to the highest perfection possible, by the way of Observation and experiment.” More broadly it hoped to stir up “the noble spirit of emulation” among Spanish scientists so that they would “use their utmost endeavors to rub off the Blemish of being slow in our Resolutions, wherewith Foreigners have branded our Nation,” and to put an end to “Scholastic Disputes . . . which have been so great an impediment to the Advancement of Learning.”<sup>26</sup>

More recently the Royal Society had learned through letters from René de Réaumur, a prominent member of the Académie des Sciences in Paris, that the French mission had completed its labors in the Quito area. Réaumur spoke of it as if it were exclusively French and did not mention Ulloa and Jorge Juan, but his letters made it clear that he regarded the mission as one of great international significance. In December 1743 he informed Folkes that according to a letter written by La Condamine in April at “Cuenza [Cuenca], not far from Quito,” its work had been finished and that he was about to return to France by way of “the River of the Amazons.” “Interested as you are in all who are zealous for the advancement of science,” said Réaumur, he was sure that Folkes would not be insensible to this good news, “which has greatly pleased all our Academy gentlemen.”<sup>27</sup> On May 4, 1745, Réaumur wrote Folkes about an address on his voyage down the Amazon that La Condamine had just delivered with great *éclat* at a public meeting of the Académie des Sciences.<sup>28</sup> Now, just a year later, the loan of Ulloa’s captured papers gave Folkes and his fellow members of the Royal Society access to the first full account of the extensive, independent observations in the Quito area by an “ingenious” young Spanish scientist who had participated in the observations from start to finish.

It is not surprising, therefore, that instead of examining Ulloa’s papers at the conveniently leisurely pace suggested by the Admiralty, Folkes completed his task and submitted his report within one week after receiving them. The text of his report has not been found, but the essence of it is indicated by the Admiralty’s letter of acknowledg-

<sup>26</sup> Royal Society, “Classified Papers, 1660-1740,” MS., Vol. XXII (2), No. 79.

<sup>27</sup> *Ibid.*, “Letters and Papers,” MS., Decade I, 236, “Translation of part of a letter from Mons<sup>r</sup> de Réaumur to Mr. Folkes,” Paris, December 17, 1743, new style.

<sup>28</sup> *Ibid.*, 403, translation of part of a letter from same to same.

ment, dated May 6, 1746. This also instructed Folkes to return the papers to Ulloa, granted his request for permission to communicate their contents to the Royal Society, and stated that Ulloa had been given permission to return to Spain. The Admiralty's letter reads:<sup>29</sup>

Sir/The Earl of Sandwich has communicated to My Lords Com[missioner]s of the Adm[iral]ty your L[ett]re to him of the 30th April on the subject of Signor Ulloa and his Papers, which you have had the trouble of perusing.

Their Lordships are very much obliged to you for the Pains you have taken to Examine those Papers, and as they prove to contain nothing but what relates to the Gentleman's private Studies and observations made by him abroad their Lordships desire you will be so good as to let him have them, when he attends you. And they are very willing that you do communicate to the Gent[leme]n of the Roy[a]l Society the Latitudes you mention, or any other collections you may have made from those Papers, that you think fit.

Their Lordships have given Signor Ulloa leave to return to Spain by the way of Lisbon or any other way he thinks fit.

Under the same date the Admiralty directed the Commissioners for Sick and Wounded to permit Ulloa to return to Spain via Lisbon "or any other way he thinks fit, agreeable to his desire."<sup>30</sup>

Folkes promptly availed himself of the Admiralty's permission, reading his "abstract" of Ulloa's journal of his observations to the Royal Society at two meetings, the first on May 8, 1746. By that time Ulloa had already attended three of its meetings as "an eminent foreigner"—on April 17 and 24 and May 1. On the second and third occasions he was formally "introduced by the President." Two weeks later he was proposed for membership by six members, and the first two signatures on their "certificate in his favor" were those of William Stanhope, Earl of Harrington, and President Folkes. On December 11, 1746, Ulloa was "put to the Ballot and elected Fellow."<sup>31</sup> The second and concluding part of the abstract was read at the Society's meeting on May 29.

The original document in the society's archives is headed "An Abstract of Don Antonio de Ulloa's Journal of the observations made by the French Astronomers and himself in Peru./by the President." It consists of thirty-four pages, written on one side of the paper.<sup>32</sup>

<sup>29</sup> BPRO, Admiralty Out-Letters (ADM 2), Vol. 67, f. 322.

<sup>30</sup> *Ibid.*, f. 92.

<sup>31</sup> Royal Society, "Journal Book of the Royal Society, Copy," MS., Vol. XIX, 1745-1748, pp. 81, 87, 95, 101, 104, 167. The other four signers of the certificate proposing Ulloa for membership were Andrew Mitchell, James Burron, William Folkes, and Cromwell Mortimer.

<sup>32</sup> Royal Society, "Letters and Papers," Decade I, Vol. Xa, no. 479. The abstract and its annexes constitute the whole of this volume. The abstract is

The abstract proper occupies thirty-one pages, on the back of which are a few additions in the way of tables and explanatory notes. Of the remainder, two pages contain an introductory statement by the president and the other a sketch of the observations around Quito by triangulation.

Considering its length and the statistical density of parts of it, this document must have provided quite enough material for the two meetings at which it was read. Parts of it are very interesting even to nonspecialists, above all the president's two-page introduction. This began with a brief statement about the "expedition to Peru," Ulloa's return and capture, and the intervention in his behalf by the Earl of Harrington, "a worthy member of this Society." It went on to say that, commanded by the Admiralty to look over Ulloa's papers, which "contained in all above 30 quires" (some 720 sheets), "I . . . examined the same with as much care and exactness as the shortness of time and my very imperfect knowledge of the Spanish tongue would allow," and took "a few notes of some of the particulars contained in [them]." A few lines below he added: "They [the notes] are indeed such as I should not have thought anyway worth reading to this company, had any other account been already published of this Expedition."

Subsequently, Folkes prefaced the copy of the abstract in the Society's archives with still another statement, which he signed but did not date.<sup>33</sup> It reads:

When I had the honour of laying this abstract before the Society, I made it my request that it might only be preserved in their archives, but not be printed, and that chiefly for the following reasons.

When the right Honourable the Lords Commissioners of the Admiralty dated at the end, "London May 8, 1746," and the date is followed by two notations: (1) "N.B. that all the dates in the foregoing Paper are as they were taken from Don Antonio's journal according to the New Style"; and (2) "Read at two meetings of the Royal Society on the 8th and 29th of May, 1746."

<sup>33</sup> The statement was obviously written after May 29, 1746, when Folkes completed the reading of his abstract to the Society, and it was probably written before the publication in 1748 of Jorge Juan and Ulloa's five-volume book on this expedition, since it makes no reference to it. The first three volumes of the work were sent to the Royal Society by the authors with a letter dated Madrid, May 19, 1748, and accepted by the Society with thanks on December 15, 1748. "Journal Book of the Royal Society," MS, Vol. XX, 1748-1751, p. 14. On May 4, 1749, William Watson regaled the Society with the reading "of so much of D. Antonio de Ulloa's account of his voyage to South America as relates to the distemper called black vomit (*vómito prieto*)." *Ibid.*, 114. Watson cited Ulloa again the following year in a paper on platinum, which "is mentioned in no other Author he [Watson] has met with, except our worthy brother Don Antonio d'Ulloa," who describes it "in his account of the gold mines in the province of Quito. . . ." *Ibid.*, 403, December 13, 1750.

were pleased to intrust me with Don Antonio de Ulloa's papers, I was desirous to despatch the same as soon as I well could . . . in which haste it is very possible I may have made several mistakes, especially as my knowledge is very small in the Spanish tongue, in which all these papers were written by their Author. And again as the same papers were intended to be very soon published by the Author himself, I was very unwilling anyway to diminish the pleasure the publick will without doubt receive from the communication so exact and I am satisfied so faithful, of what was done in the mensuration of the Degree of Latitude cutting the Equator in Peru.

The abstract proper begins with the origin of the expedition in 1734 and ends with a comment on Ulloa's discovery in Quito of "an apparent motion in the fixed stars, . . . which he rather seems to have found by his observations, than to have been informed of by the communication of the acute and judicious theory [the English astronomer James Bradley's recently published theory regarding the aberration of the fixed stars] upon which the same depends."<sup>34</sup> A two-page postscript on Ulloa's return from Peru, his capture and residence in England, and his departure for Spain follows.

The abstract drew from Ulloa's papers information on a great variety of topics but made no reference to anything in the way of "muckraking"—which even Folkes's hasty examination would surely have revealed had it been there. The abstract recounted the appointment of the French and Spanish missions, the journey of their members to Quito, and the difficulties which they encountered there. It also described the Indians of the Quito area, past and present, and some of the work of the missions. And it recorded their major assignment, which was a series of triangulations, and also measurements of the temperatures and the speed of sound, as well as "the experiment of the pendulum." Here and there it mixed in random observations of general interest about "a phenomenon of the rainbow kind," volcanoes, scorpions, a deadly spider and "chinquina or famous Peruvian Bark called Cascarilla by the Spaniards," who would not take it until the French physician de Jussieu (highly praised by Ulloa) tricked them into it. In short, this was a combination of scientific report and travelogue such as the *Relación histórica* or the *Voyage to South America*, rather than the pathological secret report on Peru which was published long after as *Noticias secretas de América*.

The abstract closed with the statement that Ulloa "is now returned home, with passports from the Right Honorable the Earl of Harrington and the Lords Commissioners of the Admiralty, from whose

<sup>34</sup> It is not clear whether Folkes meant to chide Ulloa for not knowing about Bradley's theory or to praise him for reaching the same conclusion independently.

generosity he has also obtained the restitution of his papers: a favour for which he expresses the greatest gratitude, and returns his most humble thanks.’

Traveling by way of Lisbon, Ulloa arrived in Madrid in July 1746. He did not soon forget his British friends. In his book of 1748 on the voyage to South America he made handsome acknowledgments to all those in England who had befriended him, beginning with the Commissioners for Sick and Wounded. On the title page he inscribed himself “Antonio de Ulloa, de la Real Sociedad de Londres.” As already noted, he presented a copy of it to the Royal Society. Subsequently he sent the Society at least three scientific communications. The last of them, on a solar eclipse, was submitted in 1778, nearly a third of a century after the Society, its president, and its “worthy member,” the Earl of Harrington, did so much to obtain conspicuously generous treatment for him while he was a prisoner of war. It is good to know that Ulloa’s gratitude was lasting.