

Hugh Cuming (1791–1865) Prince of collectors

By S. PETER DANCE

South Bank House,
Broad Street,
Hay-on-Wye, Powys

INTRODUCTION

A combination of superabundant energy, unquenchable enthusiasm and endless opportunity was responsible for the remarkable increase in our knowledge of the natural world during the nineteenth century. For every man of action prepared to risk his life in foreign parts there was a dozen armchair students eager to publish descriptions and illustrations of the plants and animals he brought home. Among nineteenth-century men of action few contributed as much to the material advance of natural history as Hugh Cuming (1791–1865) and none has received such an unequal press.

A widely accepted picture of the man is contained in a popular and much acclaimed book¹ published in the 1930s:

The research after the rare, a quasi-commercial, quasi-scientific research, is typified, glorified and carried to the point of exhausting the fun of the game, in the career of the excellent Englishman Hugh Cuming, a wealthy amateur, who set out in a private yacht to cruise the world for new shells, something to tickle the jaded fancy of the European collector in his castle or parsonage or shell-shop. In the Philippines Cuming sent native collectors into the jungles after tropical tree snails, and saw one fellow returning with a sack full from which specimens (every one possibly a genus new to science) were dribbling carelessly along the jungle floor. On a reef in the South Seas (which has since been destroyed by a hurricane) he came on eight living shells of the 'Glory-of-the-Sea'. Almost fainting with delight he took all eight away, and it seems unlikely that the world will ever see any others. Anyone who understands the commercial value of such singularities will not need to be told what a bull market in conchology set in when Cuming's molluscs reached the auction rooms. Shells the size of the finger nail went for five hundred dollars a piece; others could be purchased only by Rothschilds. In such romances – and orchids and butterflies have had similar ones – the part played by science is naturally limited.

Seventy-five years earlier Lovell Reeve, who knew Cuming as well as anyone, published a very different picture:²

The natural history of foreign seas and countries is abundantly studied by men who 'live at home at ease' in the midst of cabinets and books, dependent for their specimens of birds, shells, or insects, on the stores of dealers in such objects; but the number of those who have undergone the arduous personal exertion of collecting them, with a scientific spirit, in their native haunts, is comparatively few. Of this small number the life and adventures of Mr. Hugh Cuming present one of the most remarkable instances on record. It is to the collecting of shells that Mr. Cuming has mainly directed his attention; and it is chiefly owing to the care with which he has noted the habits and geographical distribution of their molluscan inhabitants that the studies of the conchologist have come to possess an interest of a philosophic kind which was formerly unknown.

Somewhere between these two disparate pictures is one representing the real Hugh Cuming. This article attempts to find it and to paint it in true colours. In a previous account the salient features of Cuming's life and activities were set out in the context of a historical survey of shell collecting.³ The subsequent discovery of new information and a growing conviction that a more comprehensive study of Cuming's achievements would be of interest to a wider audience have motivated the present offering. To allow adequate treatment of

new information I shall sometimes deal briefly with that already published by me and refer the reader to my previous account for the substantiation of certain statements only lightly touched on here.

EARLY LIFE

Hugh Cuming was born 14 February 1791 in the village of Washbrook, Dodbrook Parish, near Kingsbridge, South Devon.⁴ Thus, he was born in the year of Michael Faraday's birth and Mozart's death. He was one of three children born to Richard and Mary Cuming. Almost nothing is known about Hugh's boyhood except that he is said to have made the acquaintance of George Montagu (1753–1815), the well-known naturalist, who settled in Kingsbridge late in life.⁵ Montagu is said to have instilled into him that love for conchology which became the ruling passion of his life.

"At the usual age he was bound apprentice to a sailmaker, and the selection of this business having brought him into contact with men of seafaring habits, he was induced, in 1819, to undertake a voyage to South America. Here he settled himself as a sailmaker at Valparaiso."^{2, 6} No sooner had he settled there than he began to cultivate his interest in conchology and natural history generally and in this way he became thoroughly acquainted in a short time with the molluscs and other natural objects of the Bay of Valparaiso.⁷ Then, in 1826, at the relatively early age of thirty-five, Cuming retired from his sailmaking business.⁸ Subsequently he devoted all his energies to natural history. He was introduced to the scientific world in 1827 *via* an article on some new species of chitons (molluscs with eight-piece shells) by Lieutenant J. Frembly. To his description of *Chiton cumingsii* Frembly added the prophetic words: "I have named this species after my friend Mr. Cumings [*sic*] of Valparaiso, whose zeal in the pursuit of this interesting science will, I am persuaded, soon make a large addition to our present stock."⁹ Few could have anticipated just how large that addition was to be.

As if to ensure that Frembly's prophency would be fulfilled speedily Cuming planned a collecting voyage which would start before the end of 1827. He built himself a schooner which he named *Discoverer* and fitted it out expressly for the purpose of storing natural objects.¹⁰ Then, on 28 October of that year, he left Valparaiso for an eight-month voyage to Tahiti and back.

FIRST VOYAGE, POLYNESIA, 1827–28

In a letter to William Jackson Hooker (1785–1865), 21 March 1832, Cuming gave the itinerary of this voyage, together with details of plant collecting, incidental observations on the places visited and occasional references to his adventures among the natives he encountered on various islands. This letter, which has been published *in extenso*,¹¹ has remained the principal source of information about this voyage up to the present time. Fortunately, a much fuller source has now turned up in the shape of Cuming's Journal of the voyage, written entirely in his own hand.¹² The few extended extracts from it given below sufficiently indicate the importance and interest of this document.

As the details of Cuming's itinerary are reasonably well covered in a previous publication¹¹ a skeleton outline only is supplied here, flavoured with passages from the Journal, the only modification to these passages being the insertion of long hyphens to indicate natural breaks in the narrative where these are not indicated by Cuming's own sparse punctuation.



Figure 1. Hugh Cuming (1791–1865) from a lithograph by Hawkins, 1850.

Leaving Valparaiso 28 October 1827 the *Discoverer* touched successively at Juan Fernandez (Masatierra),¹³ Massafuera (Masafuero), Island de Pascua (Easter Island), Ducies Island (Ducie), Elizabeth Island (Henderson), Pitcairn, and Gambiers Island (Mangareva). On 6 December he attempted to land at Crescent Island (Timoe) in the Tuamotu group:

Having got under the Lee of the Land hove the Vessell too, lowered the Boat and went on shore well arm'd. On approaching the shore we observ'd the Natives running too and fro with long Lances with their War Helmets on their Heads. On coming close to the Reef which extended a considerable distance from the Land we found the opening into the Lagoon to be nearly dry and full of large pieces of Coral which much impeded the way of the Boat – in consequence we were compell'd to drag her over this uneven Bed. just as we got the Boat into deep water again in the Lagoon Two Warlike looking Fellows came running down to the Boat, with their long Lances and beckon'd us to Land. we did not consider it prudent seeing a great number running to the opening from both sides. Seeing their request not complied with, they began to prepare to throw their Lances and ran into the Water up to their waist. the Captain of the Schooner thought it would frighten them to fire a few Muskets over their Heads. it had not any effect but make them shout and dance and drew more Natives to the spot.

Making for an opening in the lagoon and finding merely a bare stretch of sand Cuming and his crew drag the ship's boat four or five hundred yards towards open water:

Soon as the Natives saw our intention to make our retreat Collected in immense numbers towards the spot we where at all arm'd with their War Helmets made of White Feathers about fourteen or sixteen Inches high, having their Bodies painted white and Black . . . from the numbers around us we where anxious to leave an Island we had come to regret our Landing on – having got into the Boat except one man who had miss'd his footing a heavy Sea came in before the People had got their oars in the Water and capsized the Boat. I was sitting in the stern was thrown on the Rocks and the Boats Gunwhale fell on my thigh with such force as to deprive me of either sense or feeling and sunk to the bottom. a Native of the Society Islands we had with us dived and brought me up on the Rock senseless. The Captian and the Boats Crew in the mean time arighted the Boat, during which, I was wash'd off by another sea and brought up again by the worthy Otaheitian.

Eventually they all get away safely, minus many useful articles which had been in the ship's boat.

The *Discoverer* then sailed to Lord Hood's Island (South Marutea), arriving there 19 December. Finding it to be rich in pearl-bearing oysters (*Pinctada margaritifera* L.) Cuming decided to make for the island of Anaa, east of Tahiti, to pick up divers and bring them back to fish for pearls. He proceeded to Anaa *via* several islands of the Gloucester group. Arrived at Anaa 25 December:

As this island produces a great variety of Beautifull shells, the collect them for sale. on my arrival I was completely pester'd with their importunities to purchase. with the advice of a Chief I postpon'd it to the next day. the King having ordered all persons who had Shells to sell to adjourn to the Grove of Coconut Trees, at the same time appointed a Chief to surpintend the sale as he knew well the would be troublesome untill they had sold what they had. according the parties retired to the place appointed the Chief having form'd a Circle in which I was to be placed with my Tobacco as that was the article demanded in exchange and the Sellers to sit around at a small Distance forming circles one without the other. all things being ready I was summond to the Grove. business soon commenc'd and as soon ended from the Natives eagerness to sell – the rush'd over one another and crowd'd me – I was nearly suffocated. I was compell'd to Quit and leave all my Shells and Tobacco behind me untill a little order was restored – I expected on my return to have found all my Trade to have been stolen and there was upwards of a Thousand Persons present – having refresh'd myself I made another attempt to purchase. on my return to the Circle I look'd around on my things and found not a single article had been lost or even removed. several times afterwards I was compell'd to leave them untill order was restor'd. having purchased all the had to sell, which fill'd Six Beef Casks for about Ten lbs of Negro Head Tobacco, I then had a little ease. a number of those shells I had purchased where useless to me from their being so common but it was highly necessary to purchase all that was offer'd for if you took out a few you would have to pay the same and the remainder would be pass'd to another person and offer'd again, and so on for fifty hands untill you had purchased them. besides I received another benefit from it. when the had sold all and had not any more means to purchase the Tobacco the would search the reefs and sands by which means I procured a number I should never have seen – when any of them brought any thing rare I made a practice to reward him handsomely for it, upon which the bystanders would go in search of the same shell, first having examin'd it to bring the like. for the smallest reward they where yours most obident.

The *Discoverer* left Anaa 28 December, reached Otaheite (Tahiti) 1 January 1828 and left 7 January,¹⁵ making for South Marutea. Cuming encountered a small, barren atoll which he could not find on any of his charts:

Consequently we considered it a New Discovery – I therefore call'd it Grimwood's Isle from the Captain's having first seen it – This Island is situated in 22.23 South L. and 140.10 West Longitude.¹⁶

Leaving this atoll the *Discoverer* reached South Marutea for the second time on 25 January:

The Meleagrina or Pearl Oyster here attains a great size the shell of an extraordinary thickness and highly usefull to the Manufacturer of Fancy goods. during my stay the Natives collected upwards of Forty Tons fit for Market. out of them I had taken above Twenty Seven Thousand Pearls, the whole weighing Thirty Two Ounces.

Cuming left South Marutea 13 March enriched very little by his pearling venture, the pearls from that area being then considered of inferior quality, and steered north towards Carysfoot Island (Tureia). The next day Cuming sighted three islands which, once again, he could find on no chart he had with him. He could not land on the nearest of them because of the hostile attitude of the natives. From the island's chief he learned that its name was 'Maturaivoa', the others being called 'Tenaroa' and 'Tenararoa'. He had discovered the Acteon Islands.¹⁷

He left the Acteon Islands and reached Tureia 15 March, leaving it the same night. On 16 March the *Discoverer* passed two islands (in his letter to Hooker Cuming says he landed on Prince William Henry's Island (Nengonengo)), sailed on to the Bunyan Group (? unidentified by me; in the letter to Hooker he said he landed on Furneaux Island (North Marutea)), and on 18 March came to under the lee of an island (in the letter to Hooker he landed on Adventure Island (Motu Tunga)). Landed at Anaa 19 March.

Left Anaa 22 March and steered for Tahiti. On 24 March made the island of Narara (? = Raingiroa), on 27 March saw the island of Conu (? unidentified by me) and a few hours later landed at Teakroa (Takaroa) in the King George group. Having visited other islands of the group Cuming proceeded to the Palliser Islands whence he departed 1 April, reaching Miatea (Meetia) the next day and Tethuroa (Tetiara) on 3 April. Tahiti was reached on 4 April. Cuming stayed there twelve days. Left on 16 April and made Huahine the next day. On 23 April sailed for Riitea (Raiatea):

The Botanical productions of this Island I had not an opportunity of investigating from the tempestuous Weather, with heavy Rains. Birds I did not see one differing from the other Islands. I procured Two species of Bulimus an a Helix from the Hills rising above the Town – Marine shells I collected a great variety and very abundant, amongst them several Rare ones. The Outer Reef taking of the force of the Sea made the Inner Reefs accessible to collect with Safety. amongst the shells I found new to me where Eleven Mitres, Three Cyprea one of them they Golden Cowry, Three Cerithiums, Two Solariums, a Cone, a Strombus, a Bulla, a Nassa, a Murex, a Natica, an Ovula, Two Olives, Five Terebras, and several others. a Pecten that I found under stones about an Inch and a half long, White, Imbricated, and Gaping is a singular shell. Crabs are highly interesting of this Island.¹⁸

Sailed south on 28 April and arrived at Ohetiroa (Rurutu) 1 May. Left this island (presumably on the same day) and reached Toobouai (Tubuai) 7 May. The *Discoverer* then set sail for High Island (Raivavae) but did not land there because of adverse weather. Continued on to Rapa, arriving there 16 May. Left Rapa 21 May and made once again for Pitcairn which was reached 28 May. (The Journal ends here. From Cuming's letter to Hooker we learn that the *Discoverer* left Pitcairn on 30 May and arrived back in Valparaiso 28 June 1828).¹⁹

Cuming spent the next few months sorting out his collections and presumably made a few local excursions to add still more specimens to them. At the same time he made plans for another voyage, of longer duration, which had as its principal objective the exploration of South America's west coast. By now he was a celebrity in Valparaiso and had some influence with the authorities who could help remove some of the obstacles he would almost certainly encounter.

The Chilean Government granted him the privilege of anchoring in the different ports free of the charges, and of purchasing stores free of duty. He was also supplied with letters to the authorities of the different States, who, in consequence, received him with marked attention, and on finding his pursuits entirely free from any political curiosity, rendered every possible facility.²⁰

Although Cuming almost certainly kept a record of this voyage no detailed itinerary is available, not even in the form of a letter. Consequently, our knowledge of the voyage must be obtained from literature published after the event.²¹

SECOND VOYAGE, WEST COAST OF SOUTH AMERICA, 1828–30

Cuming left Valparaiso in the *Discoverer* about the end of 1828 and returned about the end of 1829 or early in 1830. He explored the coast south of Valparaiso as far south as Chiloe Island and is known to have stopped at Valdivia and Concepción. According to a report in the *Gardener's Chronicle* for 1840 he was collecting shells at Concepción when he met John Anderson (*d.* 1847), a gardener attached to the survey vessel *Adventure*, who was collecting plants there. "They were strangers to each other, but felt the greatest delight when they found they were from the same country, and almost on the same pursuit, on this savage and inhospitable coast".²²

Probably Cuming collected at nearly every promising locality he saw along the coast north of Valparaiso, the following places being those most often mentioned in the relevant literature (arranged for convenience in sequence from north to south): Coquimbo, Copiapó, Iquique and Arica in Chile; Ilo, Cerro Azul, Lima, Huacho, Trujillo, Pascosmayo, Lambayeque, Paita and Tumbes in Peru; Bay of Guayaquil, Santa Elena, Xipixapi (Jipijapa), Bay of Carácas (Bahía de Caraquez), Atacames and Esmeraldas in Ecuador; Tumaco in Colombia; Gulf of Panama, Pearl Islands, Gulf of Chiriquí; Puntarenas in Costa Rica; Real Llejos (Corinto) in Nicaragua; and the Bay of St Carlos (Gulf of Fonseca) in Honduras.²³ He also collected in the Galapagos Islands and is known to have visited Charles (Santa Cruz), James (San Salvador) and Albermarle (Isabella).²⁴ Although a number of the localities around Valparaiso cited in botanical literature may have been visited during the period of this voyage he would have had opportunities to collect at them at other times.²⁵

Many of the references to shells collected by him during this voyage give the depths at which they were found, e.g. "Hab. Gulf of Fonseca, San Salvador, Central America (dredged at depth of nine fathoms); Cuming."²⁶ Cuming, therefore, was one of the first to use a dredge consistently in tropical waters. He did so, and successfully, even in places where coral predominated. "In dredging on Coral-ground Mr. Cuming employed a 3 inch hawser, and had a patent buoy attached to the dredge by a 1¼ inch rope. More than once the hawser parted, and the dredge was left down all night, but recovered the next day."²⁷ Clearly Hugh Cuming had a thorough knowledge of the technical aspects of collecting and may have been ahead of his time in developing dredging techniques.

INTERLUDE IN ENGLAND, 1831–35

Before his retirement from business Cuming had made the acquaintance of one Maria de los Santos who became his mistress. In 1825 she gave birth to a daughter, Clara Valentina, and in 1830 to a son, Hugh Valentine (the second name of each being suggested, no doubt, by their father's own birthday St Valentine's Day). The son vanished into obscurity but the daughter kept in touch with her father for the rest of his life and was obviously devoted to him.²⁸

So whither now Hugh Cuming, father of two small children, successful retired businessman, competent seaman and superlative collector of natural objects? He had made two remarkable voyages in the cause of science and had accumulated large collections of animals and plants which were potentially of great scientific value. Zoologists and botanists would surely like to get their hands on such treasures, and just as surely would be prepared to pay well for the privilege. On the other hand they were hardly likely to come to Valparaiso for them. There was only one solution. He must go to London.

In May 1831, having packed up his collections he said good-bye to Valparaiso, and to his family as well it seems, and set sail for England. He never saw Valparaiso again. The man who had successfully steered his way through a thousand dangers in places few Europeans had seen or even heard of was about to discover that the largest centre of civilisation in the world harboured sharks as voracious as any he had encountered around the atolls of Polynesia.

Even before Hugh Cuming had left Valparaiso it was known in Britain he was to arrive there soon. Alexander Caldcleugh, an enterprising botanist who spent some time in Chile,²⁹ addressed a letter to W. J. Hooker on 5 January 1831:

If you are on the look out for the arrival of Mr. Cumming [*sic*] from Chile and I have given him a letter to you, you will get an enormous prize, but do not say that I have given you this hint, he has got upwards of 40,000 specimens a great many Cryptogamous ones and lays no store by them as his Forte is Conchology. I should not be at all surprised to find him in Chile on my return [Caldcleugh was then in England] when I will try and make some Conditional Arrangement with him.

He wrote to Hooker again, this time from Santiago, on 17 December 1831: "Cuming went away from hence ten months ago and I do not doubt you have seen or heard from him as I believe he has been led on to collect by the Licence of Gain."³⁰

Indeed, before Caldcleugh had posted this second letter Cuming had already parted with the best sets of his plants to Hooker and his botanical colleague George Bentham (1800–84). It was Bentham who had the job of dealing with Cuming as Hooker was in distant Glasgow. From 11 November to 6 December 1831 there are almost daily entries in Bentham's diary which mark out his progress:

22 November: "Out early to Cuming's selecting plants, a business of which I am getting tired."

1 December: "To Cuming's in the morning till 10 – selected the cryptogamous plants which finishes the whole business . . . In the evening copied out the list of Cuming's plants."

6 December: "To Cuming's to settle the account and to give a receipt for Dr. Hooker's plants."³¹

Bentham to Hooker, 20 November 1831:

We have done the Peruvian ones which are all coast things and therefore not so new as we had hoped although there are certainly some good things amongst them. The worst of the collection is that they are not *botanically* gathered and that the specimens are too much broken up. Your set, Mr. Brown's [i.e. Robert Brown (1773–1858)] and mine will be certainly very fine.³²

Hooker to Bentham, 23 November 1831:

“Thank you very much for pointing out to Cuming such specimens as you think not good among the sets he selects for me. I engaged for ten sets purely to encourage the man, and because I believed I had 9 friends who would thankfully take as many sets off my hands. Eight are so disposed of. Only one remaining on hand. As to payment, I paid Cuming before I left London for 2 sets (£60) averaging each set at £30 (1200 species) . . .”³³

Having disposed of his plants Cuming was now able to concentrate on the objects nearest to his heart: his shells. Some of the leading conchologists of the day must have made the acquaintance of the handsome and shrewd gentleman from Valparaiso very soon after he set up house at 79, Charlotte Street in London's Fitzroy Square. George Brettingham Sowerby (1788–1854) and William John Broderip (1789–1859) were among the first to do so. They must have been amazed and delighted to see the large number of new species in Cuming's collection and speedily began preparing descriptions of them.

On 28 February 1832 the evening meeting of the recently formed Zoological Society of London was treated to a display of shells to illustrate a paper by Sowerby and Broderip, entitled “Characters of new species of Mollusca and Conchifera, collected by Hugh Cuming.”³⁴ This was the first of many such displays and nearly every succeeding volume of the Zoological Society's *Proceedings* up to the year of Cuming's death was destined to contain descriptions of new species from his collection. Unfortunately, for later generations of conchologists, the great majority of the descriptions were not accompanied by illustrations.

With the help of his son of the same name, known as G.B. Sowerby Junior (1812–84), Sowerby began to bring out in parts his *Conchological illustrations* (1832–41), a publication largely devoted to the description and illustration of Cuming's rarities. It was the first of several monographic publications for which Cuming's collection provided the impetus and most of the illustrative material. Cuming must have been feeling well satisfied with the way things were shaping up. When he was elected a Fellow of the prestigious Linnean Society of London on 1 May 1832 he had good reason to consider that he had successfully stormed the citadel of learning.

The next step for Hugh Cuming, F.L.S., was to make himself known on the continent. For the next few years he travelled widely, visiting the leading scientific establishments and private collections in France, Holland, Germany, Austria, Sweden, Denmark and Russia. Cuming to G. B. Sowerby (1st), Frankfurt, 12 September 1834: “I like the German manners a thousand times more than the French and the living pleases me much. I can eat a hearty a dinner as any German, in short I lack nothing to make me comfortable (*not even a segar*),³⁵ except your good Society is often missed to participate in my Conchological pleasures.”³⁶ This predilection for the German nation was long lasting and resulted in firm friendships with the distinguished scientist Professor Wilhelm Peter Eduard Simon Rüppell (1794–1884) and the plodding but industrious conchologist Louis Pfeiffer (1815–77). Germans and Austrians are almost as numerous as Englishmen in the list of the authorities who published descriptions of new species from his collections. Gérard Paul Deshayes (1796–1875), who described many Cumingian novelties, was one of the very few Frenchmen Cuming tolerated.

THIRD VOYAGE, PHILLIPPINE ISLANDS, 1836–50

In a very short time he had become a familiar and respected figure in scientific circles in Britain and on the continent. At the same time he was making money from the sale of specimens and constantly adding to his personal shell collection by purchase and exchange.

But all this was not enough. He had become restless again and towards the end of 1834 began toying with the idea of a collecting trip to the Philippines.

In addition to his considerable collecting experience and his fluent knowledge of the Spanish language he had acquired some influential friends, including Edward, Thirteenth Earl of Derby (1775–1851), the then President of the Zoological Society. This gentleman played a vital part in Cuming's plans. "Letters of recommendation from the authorities at Madrid to the Governor-General at Manila, to the governors of the various provinces into which the islands are divided, and to the Archbishop of Manila, procured him a hospitable welcome."³⁷ His preparations for what was to be a long absence from England occupied him for another year. In that time he was busy obtaining potential customers for collections of the various groups of animals and plants he hoped to bring back with him.

For reasons which will become clear presently no journal of this voyage is available for reference, but from letters and published literature we obtain a fairly full picture of Cuming's travels and activities. The series of letters he wrote to Hooker is particularly informative,³⁸ and these are supplemented by some he wrote to Richard Owen (1804–92) and Rüppell.

Cuming to Hooker, London, 18 December 1835:

I expect to sail from Liverpool on or about the 15th for Batavia, Sincapore and Manilla. You say I must not collect plants near the Sea Coasts. I shall not be able to refrain from it knowing now a little of the plants so that I won't collect the same at every place I meet for I am of an opinion I may get plants on the Sea Coasts that has escaped the Eyes of all others. I did so in Chili and trust to do the same in the East and when I cannot collect plants with seeds and flowers at the same time I intend to collect them separate so that you shall be able to make them out. I have orders for all kinds of seeds with Branch &c.³⁹

He embarked 15 January 1836 and reached Manila six months later on 24 July.

Cuming to Hooker, Calaguan, Province of Laguna de Bahia (i.e. Calauan, Laguna Province), Luzon, 10 November 1836:

I am living and well in a perfect paradise having collected on this Estate alone 500 species of plants in Six Weeks besides innumerable species of Insects Shells and Reptiles.⁴⁰

Cuming to Hooker, Manila, 24 December 1836:

I have the pleasure to inform you of my arrival at this place on the 24th of July last just as the Rainy Season had set in therefore I could not make any excursions in the Country until the end of Sept. then I left this place for the Hacienda of Calaguan in the center of Luzon where I remained until the 15th of this Month making excursions to the Woods and Mountains in the Neighborhood and I trust my Labours will meet your approbation having collected about 1150 species of all classes since my arrival and I am proud to say nearly 1/10 are Ferns of the most beautiful forms you can conceive. Two species are Trees and one a perfect shrub throwing its branches like the Fir, and all in Flower, except two or three species. I have also many species of Mosses but not many Flowering Shrubs, like those of Chili in form. Many Trees give splendid Flowers but their time is principally in March, April and May, but many of them flower twice a year. I have collected upwards of 50 Species of Orchideae but not many in Flower and of the Fungi 125 Species.

I am now preparing for a Voyage to the Southern Islands viz. Zebu, Negros Leyte and Mindanao, and if I am not made a Prisoner by the Malays I trust I shall on my return in July next be able to give you as equally good an account of myself. As yet I have not made any excursions on the Sea Coast but yet I have collected 250 Species of Shells; Insects, Reptiles and Crustaceous subjects have had their due, and I have even surprised myself in what I have done.⁴¹

Cuming to Owen, Manila, 1 November 1837:

Your most esteemed favor of Octr.21.1836 came to my hands on my arrival here from the Southern Islands a few days since. The melancholy event of my most esteemed Friend's Death has

quite unnerved me for the moment and will prove a source of regret for the rest of my life. The loss his friends have met with is great, the Society and Science still more. I feel much obliged for your kind attention to my interests, and trust the next letter I receive from you, or Mr. Woolmer, the whole will be settled as it ought to be. Mr. John Bennett has done me a great favor by taking charge of the collection for which I hope he will accept my gratitude and thanks. Since I wrote you last I have made great additions to my collections of Natural History; all reptiles, Insects, Fishes, and shells with the Animals I now send you in 5 Cases marked and numbered in the margin containing 84 Jars and Bottles trusting you will have the goodness to take charge of them for me until my return; all the animals, Reptiles, and Fish, you and your Friends Mr. Bell [Thomas Bell (1792–1880)] and Mr. Yarrell [William Yarrell (1784–1856)], are at perfect liberty to describe, figure and publish to all the world. I should not like to have the shells in spirits touched until I arrive home, as there are several new genera that will prove highly interesting to you and the Scientific World; respecting the insects perhaps they had better remain in their Bottles with a little Weak Spirits put to them, also the shells. In your next let me know how Mr. Westwood [John Obadiah Westwood (1805–93)] has acted with the Insects, if he has given you satisfaction. You can let him proceed with others if he has completed those I sent by the Alexander, not else.

Amongst the Animals which I have now sent are a few shells with the Animals, let them be put with their companions if there is room, if not put them by themselves. I have sent a large Case of Crustacea to Mr. Bell containing 12 Boxes, for him to describe, and to present one of each species to the Zoological Society in my name. Mr. Bell is to keep possession of the remainder until I return; amongst the Crustacea are a few Fish which he will be pleased to deliver to you or Mr. Yarrell who I presume is now our worthy Secretary. You did not mention who had succeeded our lamented Friend [Edward Turner Bennett (1797–1836), Secretary of the Zoological Society], it is from the newspapers I made the presumption as there I saw Mr. Yarrell read this and that paper. Amongst the Animals in spirits are a young male and a full grown Female Malmog and a young Caguang just brought forth, the bones of the mother I have sent to you in one of the Cases. I have not seen either the Nautilus or Argonaut alive, and but few dead shells I trust you will be pleased with my labours, don't say I have been idle. I have now collected 1809 species of shells, 1900 d[itt]o plants, you know the rest, all in 13 months work; my land shells are magnificent, I have Gloria Maris [*Conus gloriamaris* Chemnitz] and others more valuable in my opinion. Mr. Sowerby, Mr. Broderip & yourself will have to make several new genera, I have the Animals take great care of them. I am glad to hear the prosperous state of the Society, and the conclusion of your museum. none of the Animals in spirits have I given to the Z.S. until you and I meet, you understand me. You did not say if their was any new species of the Owen Family, I trust there is. Give my kind regards to the good Lady, also to Mr. & Mrs. Clift [William Clift (1775–1849), Curator of the Museum of the Royal College of Surgeons] I congratulate you upon your new appointment; the Keys of the Cases are No. 39 the Case nailed down.

If any of the Crustacea are figured I beg the favor to let young George Sowerby engrave some of the plates I entertain a high respect for the Father & Son, I would be happy at all times to be of service to them. Trusting I shall have the pleasure of seeing you in 1840 with your good Lady in health and happiness, will ever be of the prayer of

Your most Obedient friend
& well wisher
H. Cuming

To Richd Owen Esqre
F.L.S. F.R.S. F.Z.S. &c.

N.B. Whatever is done respecting my collection by you and my other good Friends will give me pleasure well knowing that you and they will cut for the best at all times. In case 40 you will find the skeleton of a male Porcupine from the Calamanes [Calamian Group] and a female Caguang. I hope none of the Bones are lost. I have also sent the Society two living Horn Bills and two Pigeons all young and likely to get home. When at the Isle of Negros I purchased two young deer of a new species very beautiful and perfectly tame the Governor promised to forward them to my friend here but they have not arrived, for he writes that one had died, the other he sent but I find it had died on the passage to this place.

You little know what disappointments and losses a collector undergoes in a Country like this.
Adieu Adieu

I have enclosed a Bill Lading for the Cases which are forwarded by the Fairlie Captn Ager for London marked [a 'C' within a lozenge-shaped cartouche] No 1, 10, 38, 39 & 40.⁴²

A year later he wrote to Hooker, giving him details of his successes in plant hunting. Cuming to Hooker, Manila, 18 November 1838:

I did myself the pleasure of writing you in Dec. 1836, and also in Nov. 1837 [? dated Nov. 10, 1836] and up to the present date I have not had an answer from you. I am fearfull the letters must have been lost, although all the others, I sent to England arrived, and have been acknowledg'd.

In my former letters I gave you some Idea of what I had been doing in this part of the World and my success in Collecting &c. I now will give you a small idea of my Voyages to the various provinces and Islands in this Government.

My first excursion was to the center part of Luzon, where I collected but a few things, from the state of Cultivation, &c.; the next, to the borders of the great lake where I collected about 200 species of plants, Ferns was the principal feature of the Trip. My next excursion to the Islands in the South as Panay, Guimaras, Negros, Siquijor, Zebu [Cebu], Bohol, Camiguin [Camiguin de Misamis] and Mindanao, which occupied 10 months and at the close the plants amounted to 1900 in all, in which were many Ferns. My last trip has been a continuation of the Southern Islands, viz. Samar, Leyte, Masbate, Ticao, Burias, Mindoro and the South eastern Provinces of Luzon as Albay, Camarines, Tayabas and Batangas, here my Ferns have augmented vastly. I may say with propriety I have 400 species amongst which many Trees and one Shrub. In the Island of Samar I found a Rafflesia of which I have dried specimens and in spirits on the Roots of Trees, on which they grew, several species of Nepenthes, but few Flowers. Mosses, Lichens and Fucii are scarce, small annuals hardly any, shrubs but few, large Trees, and small ones, in abundance. The Vegetation is so luxuriant the smaller plants cannot live, all open spaces are cover'd by high grass to 9 ft. high. My species now amount to 3000. The Ferns are magnificent of which I have ample sps. I have ascended several mountains to the very Top some 5, 6, and 7,000 Ft. high. On the Sea Coast nearly all the plants are the same in all localities; in the dark woods and deep Glens is my delight. The Ill Health and fatigue that I have experienced has been very great, my Eyes are much injured by the sun; in short I am 10 years older than I ought to be. I am now preparing for the Northern part of the Island and expect to return in July next. In Oct. I leave this [place] for Singapore and that place in March 1840 for England of which I will advise you in time.

From the Govt. and all the Public authorities I am continually receiving proofs of their Friendship and protection and the Friars are my best Friends. My other Collections are equally rich, Shells, Birds, Insects &c. I have forwarded to the care of Mr. Brown a Trunk of a Tree Fern which I collected in the Crater of a Volcano; there were Thousands. I have but few small species some are so large that I have been compell'd to divide a leaf in four that has not a stem. In the North they are abundant in the Mountains. How I shall succeed I can't say as there is war betwixt the Negros and the White people and has been for some years. I must venture I cannot leave such a spot unsearch'd.⁴³

After almost another year of hectic collecting he wrote a cheerful letter⁴⁴ to his distinguished German friend.

Cuming to Ruppell, Manila, 20 October 1839:

It is with pleasure that I embrace the opportunity of a Vessel sailing from this place for Hamburg to let you know that I am on the point of sailing from this port for Malacca and Singapore and expect to leave the latter place for England in March 1840. Therefore you may expect to hear of my arrival in London in July following, of which I will give you due notice

And now my dear Friend I do myself the pleasure to give you some idea of what I have been doing since I left England in the Phillipines. I have collected about 3400 species of plants amongst which 400 species of Ferns. 3045 species and varieties of shells of which the Terrestrial and Fluvial amount to 550 species and varieties. 1200 Birds a few Quadrupeds. Many Thousands of Insects, Crabs, Reptiles etc. etc. amongst the shells I have found Magilus, Leptoconchus and Pedum but not in abundance or so fine as yours. I think I can say with propriety I have collected about 2000 of New and undescribed species, the major part of them small amongst them are 5 or 6 New Genera.

I shall feel most happy to send you from London on my return two species of Hornbills and many other Birds which you have not in your Museum, which you will be pleased to present to it in my Name.

At the same time; from time to time, I will forward you Shells, Insects, plants etc. when described and made known and should you in the meantime have procured any thing New in Shells, I shall be most proud to receive them from your hands.

The pleasure in doing what I have before stated will be great indeed to me knowing well the slender state of the Museums funds, the liberality of the Inhabitants of Frankfurt and your unparalleled Zeal in the cause of Science, and my admiration of your Fine Old City all prompts me to add to your beautiful and Chaste Collection. I wish my circumstances would allow me to do more.

Give my best respects to Dr. Smith and the worthy Senator who I had the pleasure of sending Insects too in 1843 [Carl Heinrich Georges von Heyden (1793–1866)].

I am proud to say my health within these last four months has been completely restored, at one time I never expected I should ever return to Europe having had a Bowel complaint for 20 months, six Fevers and other complaints of a serious nature. Now thank God I am in better health and have more strength than when I arrived in the Philippines and I sincerely hope that you equally enjoy the same and that we shall have the pleasure of meeting once more.

I am Dear Friend
Yours Most Sincerely
H. Cuming

A final letter⁴⁵ was sent to Owen in which he expressed some doubts about his abilities as a scientific collector and indicating how much he had valued Owen's friendship throughout the Philippine venture.

Cuming to Owen, Manila, 5 November 1839:

Here I am on the point of embarcking for Singapore and Malacca, having concluded my rambles over the Phillipine Islands; what success I have had, I must leave that to be determined by you, and the rest of my valued Friends at Home for my own part, I am perfectly satisfied as far as collecting is to be considered, but I am not at all satisfied with my lack of knowledge of various kinds; that would have made my voyage a valuable addition to the scientific stores of my valued Friends in England; regrets are useless, if we have not the mental power to repair ones defects.

From those persons who are not aware of my defects, I expect a great deal of censure, for not having entered into more scientific details; to them I must bow my Head in silence, but I trust those of my worthy esteem'd scientific Friends who know me well, will give me some small degree of credit for my industry and perseverance through sickness, Rainy Seasons, and all the inconvenience of Travelling through unexplored Countries by Land and Sea, my object having been accomplished of adding a mite to the scientific stores of my Native Country. I shall rest contented if I can meet the approbation of you, my dear Sir, and a few of my old Friends whose pursuits, and Friendships have not for a moment been lost sight of by me.

I shall leave this place for Singapore on the 11th of this month, and if I can find a good vessell, I intend to embarck for London on or about the latter end of February or the early part of March and expect to be in London in the month of July, and as the World will be going out of Town by that time, it will give me leisure to get my house in order by their return in Oct. and Novr.

By the ship Symmetry Capt Bulter [i.e. Butler] bound to London, I have ship'd seven cases of Insects, Animals, Reptiles, Fish and shells all in spirits, to your good care and keeping, amongst the objects now sent home I trust there will be many things that will interest you upon examination.

I should recommend you to change the spirit of cases No. 2, 7 and [cipher], all the rest will not require it, as it has been done by me previous to shipping, when I change the spirits in the Jars, such as are in the above mentioned cases, I draw the spirit off by a Syringe without moving the Animals or Shells, as many of the Animals of the Bivalve fall out in moving, inclosed in this letter you will find a Bill of Lading for the seven cases. [A passage here of no interest or relevance].

I have not been able to procure the Nautilus or the Tamarao, the only Two things that are to be found in the Phillipines that I have heard off and could not procure.

Give my kind respects to Mrs. Owen and *Family*, and also to Mrs. and Mr. Clift trust I shall have the pleasure in July next of seeing you all in the best of Health, I am proud to say, that my health is now better than it was the day I landed in Manila in 1836.

To my other Friends and acquaintances be pleased to make my respects and say I trust I shall have the pleasure of seeing them in July 1840

My dear Sir,
I am Yours most Sincerely,
H. Cuming

[A short passage here of little interest concerning the cases].

N.B. Since I wrote the within I had the great pleasure to receive yours of the 19th of June 1839 for which accept my most hearty thanks, your letters always put new life into my *Soul*, what a cheering word is *Friend* in its proper sense. One of your letters give me more pleasure than Twenty others, well knowing the great cause which prompts the writer and the lustre which he throws, Science, by his unrival'd knowledge. a Thousand times I wish you Joy respecting the Argonauts adv... .

H.C.

From these letters and from published sources we know the principal islands and towns Cuming visited:⁴⁶

Bantayan, Bohol, Burias, Camiguin de Misamis, Capul, Cebu, Corregidor in the mouth of Manila Bay, Cuyo, Guimaras, Leyte, Lubang, Masbate, Mindoro, Negros, Samar, Siquijor, Tablas, Temple and Ticao. On the island of Mindanao he visited the Province of Misamis and on the island of Luzon the Provinces of Albay, Bulacan, Cagayan, South Camarines, North and South Ilocos, Laguna, Nueva Ecija, Pampanga, Pangasinan, Tayabas, Tondo [Rizal] and Zambales.

There is no proof that he visited the large island of Palawan.

Cuming to Hooker, London, 5 June 1840:

It is with pleasure I have to inform you of my safe arrival here this morning from Singapore with all my Collections I trust safe, and in as good a Condition as I am in Health.

Since I did myself the pleasure of writing you last, I have been at Mount Ophir in the Malayan Peninsula and have had the great pleasure of Collecting the splendid Fern [*Matonia pectinata* R. Br.] which I promised you to do before I left and many others from that Locality. It is not found at the Foot of the Mountain but 4600 feet high in great abundance, of which I have taken the liberty of Collecting a number of the finest specimens. Its roots creep along the Ground and each Frond stands from 5 to 7 Feet high.

If I have my Health, I expect to have all the plants in Order by the latter end of August and if it should meet your convenience to be in London at that or at a future period I shall be most happy to see you when a division is made of the Specimens more particularly so as it is my wish for you to have the first Choice in all plants as before ... I have 15 Species of Ferns from St. Helena which I collected one day there.⁴⁷

Inevitably a traveller-naturalist in the tropics experiences many difficulties and setbacks, particularly if the collecting of natural objects in quantity is his main objective. Even after he has returned home safely with all his collections there may still be disappointments in store.

Cuming to Hooker, London, 1 August 1840:

I hasten to inform you that I have found Seven of my Cases of plants completely ruin'd by Water, the Tin Cases being eaten through and full of Holes. It must have occur'd in Manila, where the Cases were placed in a Store over which lived a Family who must have let water fall through the Floor and as there was not any Ceiling it did not leave any marks behind

I am fearful the above loss will reduce my numbers to near 2,000 Species. If so my loss will be great but it is not any use to repine. I know that your disappointment will be great even more than mine.⁴⁸

As Cuming had brought home with him 147 large cases this loss was not so great as his letter suggests.

REJECTION AND ACCEPTANCE

Cuming was much more upset, nine months later, by a disappointment of a very different kind. About May 1841 he sent⁴⁹ Hooker the Journal he had kept during his voyage, or possibly an improved version of it.

Cuming to Hooker, London (undated):

It is with great pleasure I forward to you my *Child*, with all its imperfections bad grammar &c. &c. &c. for your perusal and to select those portions that are fit to meet the public Eye. I tremble at the thought of appearing before the public in the light of a Tourist or of one attempting to describe a New Country. Do speak of it as a light trifling thing as notes taken down in the wearied hours of a man suffering under disease and Fatigue whose only recommendation is Industry and perseverance under a Thousand disadvantages ...

If any dark passage meets your eye note it and let me put it aright for I have not had time to read over what I have written, and the universal bad language which I have written will give you a most mean opinion of your Humble Friend ...

I shall feel most obliged for a Manuscript Copy previous to its being sent to the press that I may be able to correct the Names of places and other matters, and let a few Copies be printed of seperate, to give my own private friends who feel a Brotherly interest in the labours of their relative ...

Relying on your great Influence with the Botanists of this, and other Countries, I repose the dreaded Book into your Hands.

From the tone of Cuming's next letter⁵⁰ it is easy to judge what Hooker's reaction had been to the 'dreaded Book'.

Cuming to Hooker, London, 25 May 1841:

Now my dear Sir I must beg your kind indulgence for appearant trifling on my part respecting my Journal. I am most truly sorry that I should have given you so much trouble and then disappointment in this affair. I now candidly confess that I felt so much asham'd of the gross Ignorance of the English Language which I made in writing of the Journal and which I have not the ability to amend that I was compell'd to write you what I did and as you was justly hurt at my appearant trifling I had not the courage to answer your just rebuke at the time when you had so much to attend to and of so much importance, I can assure you I have been much hurt ever since I received your letter particularly as I have from the first day that I had the Honour to be known to you received the greatest attention and acts of kindness from your Hands. If I could have the pleasure of seeing you at any time convenient to yourself I trust I should be able yet make some amend for the appearant trifling conduct of mine, that kind of conduct I most devoutly detest, and to labour under that Character in your estimation grieves me much.

The potential value of this Journal to those interested in the history of the Philippines, likewise to systematic botanists and zoologists, must have been very considerable. Its disappearance may be fairly blamed on Hooker who, while always prepared to benefit from the fruits of Cuming's labours, seldom took the man seriously – he seems to have sent no letters to Cuming throughout his long sojourn in the Philippines – and never offered the hand of friendship. It was otherwise with Richard Owen who always provided Cuming with help when it was needed and treated him kindly and with respect. From Cuming's letters it is obvious that he was much less at his ease with Hooker than with Owen. By sending his Journal to Hooker rather than to Owen he committed an error of judgment which impoverished himself and us.

Owen was always very interested in Cuming's shell collection and did all he could to see that its scientific value was fully recognised. He acted as one of the Trustees of the shell collection Cuming left behind in England when he went to the Philippines.⁵¹ Later on he made an impassioned plea for the acquisition of the much enlarged collection by the Trustees of the British Museum. As a zoologist himself he may have been better equipped than Hooker to appreciate Cuming's abilities. He was also nineteen years younger than

Hooker and so was probably more pliable and more tolerant of Cuming's educational shortcomings.

Although Cuming had brought back animals of all kinds from the Philippines it was, of course, his shells which claimed most of his attention. Specialists were called in and the *Proceedings of the Zoological Society* and similar journals continued the publication of articles describing new species of molluscs from the Cuming collection, the novelties he had collected earlier being by no means all described by the time he returned from the Philippines.

In 1842 G. B. Sowerby (1st) began publishing his *Thesaurus conchyliorum* (destined not to be completed until 1887), a series of illustrated monographs on shells based on the Cuming collection.⁵² Cuming took a keen interest in the progress of this work. Writing to Georg de Koch, 18 May 1858, he says:⁵³

Agreeable to your request I have forwarded to my Friend Capt. Fokkers for your parts 17 and 18 of the Thesaurus, and I think you will be much pleased with them from the number of New Species that is figured in the Two Parts and to find the old names of Chemnitz, Martini, Born, &c &c restored, that Lamarck and Bruguere [i.e. Bruguière], and others had ignored, or did not know. Justice is now the order of the Day amongst the English and German Conchologists, and the French must also comply as they younger ones now begin to see the propriety of it.

Close on the heels of the *Thesaurus* came the even more ambitious *Conchologia iconica*, the first monograph of which was published by Lovell Reeve in 1843.⁵⁴ By far the majority of the specimens illustrated in it were from the Cuming collection and a lithographed portrait of Cuming occurs in most copies of the first volume. In the field of conchology no-one has been memorialised so magnificently in a book as was Hugh Cuming in the *Conchologia iconica*.

THE MIDAS OF THE SHELL WORLD

While systematists pecked away at Cuming's large collection he made sure there would be still more for them to peck at when they had finished with the specimens he had collected personally. Continuing his continental travels he kept adding more and more specimens to his shell collection by exchange and purchase. At the same time he was making a name for himself as a dealer in natural objects, especially shells. As time went on he devoted himself more and more to the commercial aspects of conchology, his stock of shells and his shrewd business sense ensuring that he had no near rival among contemporary dealers, as S. P. Woodward indicated in 1861: "We will suppose the conchologist has chosen his textbook, and proceed next to speak of localities for purchasing shells. The prince of shell-merchants, of course (facile princeps), is Mr. Cuming, of 80, Gower Street, who can supply whole collections, and many costly varieties which no-one else could obtain."⁵⁵

In addition to enlarging his stocks by purchase and exchange he induced other traveller-naturalists to collect specimens for him in far away places, notably in the tropics. The inducements were always financial. In 1844 the thirty-four-year old Philip Henry Gosse (1810–88), then about to embark for Jamaica as the result of a discussion with Edward Doubleday (1811–49), was drawn into Cuming's orbit. "Doubleday introduced him to Hugh Cuming, of Gower Street, as an agent for selling the collections to be made, and this gentleman, himself a successful collector, gave Gosse some useful instructions."⁵⁶ At about the same time Hugh Low (1824–1905) set out on a collecting expedition to Borneo, while

David Dyson (1823–56) sailed on a like mission to Honduras. Both of these young men had made similar agreements with Cuming.⁵⁷

Richard Spruce (1817–93), famous for his botanising activities in the Amazon Basin, was one of many other traveller-naturalists with whom Cuming had dealings. Through George Bentham he sent the following letter, dated 25 April 1856:

My friend Mr. Bentham read your letter (at the Linnean Society) from the foot of the Andes, in which you desire Subscribers to your labours – and further, you wrote you had collected for my friend Dr. Greville [? Robert Kaye Greville (1794–1866)] many species of Shells. – I only regret that I had no knowledge of your collecting Shells before as I was led to believe you only collected Plants. – And as I have the largest collection of Land Shells in the World and you may suppose particularly desirous of increasing it – more particularly from the Interior of South America where they abound to a great degree, and every locality produces a different Species. – I have those Collected by Messrs Bates [Henry Walter Bates (1825–92)], Yates, Wallace [Alfred Russel Wallace (1823–1913)], Porte, Boissier [= Jules Bourcier], Funk, Chemilin, and various others, and each Gentleman produced different species. – I have more than 400 Species from the Continent of South America. – And have Collected myself in Chile, West Peru, and West Columbia [i.e. Colombia], and do not possess one species collected by two different persons: therefore, I presume you will be able to collect a vast number of Species on the east and West Slopes of the Andes – For Mr. Lobb informed me when he was there the species were most abundant, and I bought all his species, and everyone proved *New* – To give you an idea what a valuable acquisition it would be to your labours in a pecuniary point of view, I gave last week £124 for a collection made by a Gentleman in Mexico,⁵⁸ and shall be equally inclined to be as liberal to you, provided you send the Shells in good order. – I do not know if you are aware how to get the animal out when taken alive: – when you bring them home where you are staying, put them into a Vessel, and pour boiling water on them – when a little cool take the animal out with a pin, as you would a perriwinkle – Then wash them with an old toothbrush, – shake out the water, and put them to dry – Then pack them away in small Cigar Boxes, to prevent their being broken which if not full, put in cotton or grass to prevent their shaking about and breaking. Also putting in each Box the locality where collected, and any other particulars. Also not to put large heavy heavy ones with the small and fragile ones without Cotton or Grass betwixt the layers – Broken or dead Shells without colour are of no value; but oftentimes you will find Shells dead, that are as good as live ones, owing to the animal being but just dead, – & the Shell not yet bleached by Sun or Rain; therefore, do not throw them away when in a good state. I shall be glad to receive as many as 30 specimens of each Species, and equally as much esteem the minute as the large species. Land Shells reside in various localities, – some *on* the leaves and trunks of trees & bushes – others are found *in* the trunks, and under rotten trees – others again are found in dense woods under leaves, and decayed Vegetable matter. – To obtain these I used a stick to draw aside the dead leaves, – about two feet long – for fear of Venomous Snakes, Reptiles, etc. Others again are found under stones, and in crevices of rocks, and some are found partly buried in the earth, under moss, lichen, etc. In short it is difficult to point out a place where they are not found. Those shells which have an operculum or mouth piece, be careful to preserve it with the Species it belongs to, as they determine the Genera – There are Shells to be found in the Rivers, and mountain Streams, both *univalves* and *bivalves*: I should not recommend you to collect more than 6 specimens of each species, as they are not so much esteemed as the others; but it is a benefit to Science that they should be known, and will afford me a great deal of pleasure to cause all the new ones to be described and figured in the Zoological Proceedings.

Trusting the above will meet with your approbation and that you will be highly successful in collecting Shells, etc. and enjoy good health.

I am, Dear Sir
Yours most sincerely
H. Cuming⁵⁹

Most of the traveller-naturalists who entered into an agreement with Cuming enriched his shell collection. As an agent he acted principally for himself. Often he advanced money on the assumption that he would receive adequate repayment in specimens after a fairly long

interval. Sometimes he waited vainly for an acceptable return on his investment. He advanced money to John MacGillivray (1822–67), the naturalist of the *Rattlesnake* expedition to Australia, but far from being adequately rewarded for his outlay he was still very much out of pocket three years later, during which time he had had the additional burden of giving financial support to MacGillivray's wife.⁶⁰ No doubt he had other bad debts resulting from such transactions, but overall he seems to have gained much more than he lost.

That Cuming wanted to monopolise the market in specimen shells is obvious from his correspondence with certain American conchologists. Cuming to Thomas Bland (1809–85), 30 April 1852: "You observe that you are likely to get specimens of the *acosta* of D'Orbigny [? = *Acostaea* D'Orbigny, a genus of freshwater univalve molluscs found in South America], I will take 20 or 30 at £1. each provided you do not send any away or allow them to be in other hands otherwise they are not worth to me so much."⁶¹

Apparently his main concern was not so much to make money by controlling the market as to use the extra material in exchange for rarities yet to be added to his collection. His generous payments for material he coveted were sufficient inducements for his correspondents to go out of their way to supply what he wanted.

John Gould Anthony (1804–77) to T. Bland, 23 October 1856: "Started another man off this morning for two days trip to Indiana for Unios to a special locality where they grow large. I shall move heaven and earth to get good specimens for Cuming. All my wits are at work for him and if there is any 'good thing in Nazareth', I am bound to ferret it out for him."⁶¹

Whenever there was a chance to add something to his bulging cabinets Cuming was sure to be on hand. Thus, he became a familiar figure at natural history auctions which events were a common feature in the London of his day. One of the last, if not the last, auctions he attended was that of the famous shell collection of John Dennison, held at Stevens's Auction Room, Covent Garden, in April 1865. The young conchologist James Cosmo Melvill (1845–1929) saw him there:⁶²

I have a very vivid recollection of seeing him sitting before the green baize table in front of the auctioneer's desk, and very intent on the various treasures as they were handed round lot by lot being put up to auction. I remember him as a somewhat stout, rubicund, good-humoured looking old man, with scanty, white curly hair, dressed in black, with open waistcoat, and white-frilled shirt front.

A few months later Cuming was dead and the many duplicates from his huge shell collection were sold in the rooms where he had witnessed the demise of so many other collections.⁶³ The auctioneer, Henry Stevens, must have felt a certain sadness when presiding over the Cuming sale. A shell collector himself in his younger days, he had spent many evenings, as a boy, in the company of Cuming who allowed him to handle his treasures and gave him useful advice on aspects of shell collecting.⁶⁴

Cuming developed a flourishing business as a dealer and handled orders expeditiously. Edgar Leopold Layard (1824–1900), who first knew him personally in 1852 or 1853, was one of the few privileged to enter his work room on the third floor of his Gower Street residence and to watch him go about his business. Reminiscing about his days in Cuming's company, thirty years after the latter's death, Layard said:⁶⁵

He had a long plank table on trestles running the entire length of the room with its three windows. Along this he would walk, with a basket, or box, full of shells in one hand, from which he selected such specimens as he intended to supply to the collection making up. Placing them on the table, he would dictate to the secretary, name, author's name, and locality. These the young man wrote on a slip of paper already prepared, and placed by the specimens, which were afterwards packed by him.

To the shipment thus prepared would be added a complete list of the items sent.⁶⁶

His commercial dealings came to occupy most of his time, but he maintained a lively interest in the purely scientific aspects of conchology and supplied information freely whenever called upon to do so. To those responsible for making his collection well known by describing and illustrating specimens from it he was always liberal with his knowledge, as might have been expected. Because his collection was more complete even than that in the British Museum it was almost impossible for systematic conchologists to get by without using it or without calling upon Cuming's help.

There were others who wanted to pick his brains for their own purposes and to these he was just as helpful. The most distinguished of this latter class was Charles Robert Darwin (1809–82) who was assisted by Cuming in several ways. Cuming supplied much of the information on shells published by Darwin as well as many useful notes on coral reefs.⁶⁷ He also named most of Darwin's shells, including those he collected in the Galapagos Islands (Cuming's list of the latter being now lost).

A COLLECTION FOR SALE

Cuming had withstood all the rigours which travelling in the tropics imposed on a European in his day. But his years of collecting in the steamy jungles of the Philippines eventually took their toll. In 1846 he became seriously ill, having suffered a stroke, and for a time he was not expected to survive. It was then that his daughter Clara came over from Valparaiso to act as his nurse, for he was otherwise without female companionship for the rest of his life. He decided to offer his collection to the British Museum. On 12 December 1846 he wrote a letter to the Trustees offering it to them for the sum of £6000. Several eminent zoologists, including John Edward Gray (1800–75), Edward Forbes (1814–54), W. J. Broderip and Richard Owen sent letters to the Trustees urging them to purchase it for the nation. Owen's letter⁶⁸ was a lengthy plea totally lacking in critical appraisal. Gray, in several letters, was coolly sceptical about the scientific value of the collection. The Lords Commissioners of Her Majesty's Treasury declined to purchase.⁶⁹

Cuming recovered, but his illness, which had afflicted him with a form of paralysis, affected his health seriously for the rest of his life, chronic bronchitis and asthma ensuring that he would never again know what it was to be really fit and active. Thus, Hugh Cuming post-1846 was a different person to Hugh Cuming pre-1846. The robust, energetic man keenly interested in the advancement of his corner of science turned into an enfeebled pedlar of shells spending most of his time cooped up in his work room with his shells and his secretary.⁷⁰ Nevertheless, he still kept in close touch with leading conchologists and continued to travel extensively. In 1851 he even ventured as far as the United States to make the acquaintance of conchologists there.

Hugh Cuming died 10 August 1865, having attained his seventy-fifth year.⁷¹ He breathed his last, therefore, in the same year as Abraham Lincoln, Elizabeth Gaskell, Achille Valenciennes, Charles Waterton, Sir Joseph Paxton and three men whose careers had crossed with his: Samuel Pickworth Woodward (whose *Manual of the Mollusca* (1851–56) owed much to Cuming), Sir William Jackson Hooker and, ironically, his great friend and would-be pall-bearer Lovell Augustus Reeve, who died a few weeks before him.

Once again his shell collection, now much augmented in size (but not necessarily in quality), was offered to the Trustees of the British Museum for £6000. This time the offer

was accepted and the collection, containing 83,000 specimens, was purchased for the nation in 1866.⁷² Among the numerous apocryphal legends surrounding Cuming and his collection is one concerning its fate shortly after the collection was purchased.⁷³ According to the now accepted version of the story, however, the collection was carried piecemeal by two attendants, Edward Gerrard and John Saunders, into Mrs Maria Gray's room, a few yards in from the portico of the British Museum, where she mounted all the specimens on wooden tablets — the acceptable procedure then. The labels accompanying the shells were subsequently glued to the tablets.

CONCLUSION

Despite the many adverse criticisms which have been levelled at it⁷⁴ the Cuming shell collection, still by far the most important ever to be assembled by one man, is the abiding monument of the man who formed it. Hugh Cuming's accomplishments as a traveller and collector of natural objects have been largely forgotten (because largely unknown), and his influence on the course of systematic zoology and botany in the nineteenth century has not been sufficiently acknowledged (or acknowledged for the wrong reasons). Undoubtedly his influence was considerable and, on balance, beneficial.

It would be incorrect to say that Cuming was merely a compulsive collector. He went to a great deal of trouble to see that his specimens were studied by appropriate specialists and he freely gave information on a variety of topics to distinguished scientists. That he made money by trafficking in specimens should not be held against him. P. H. Gosse, H. W. Bates, A. R. Wallace and many other men of unassailable reputation collected natural objects partly or wholly to make money out of them; and not a few of these men were assisted financially by him.

Cuming made a conscious decision not to publish the descriptions of any of the new species he acquired, an activity for which he knew he was ill-equipped. Nevertheless, he has often been accused of vicarious species-mongering by inducing others to describe new species for him.⁷⁵ Few seem to have realised that his severe illness in 1846 had a profound effect on him for the rest of his life and contributed to a marked lowering of the high standards he had set for himself previously.

Additions to Cuming's shell collection and his treatment of them after 1846 probably account for most of the erroneous information which crept into the literature dealing with parts of that collection. Published information on shells *he collected personally* is largely free of significant errors relating to cited localities (although it may be otherwise with the plants he collected personally). On the other hand it must be admitted that the many published errors, mainly concerning locality information, which have stemmed from specimens once owned by Cuming have caused systematists many headaches and have created considerable confusion. These should be balanced against the positive contributions made by Cuming's collecting activities and should be seen in the light of conchological science as it was in his day.

Hopefully, Hugh Cuming's total achievement will come to be more fully recognised and his character assessed at its true worth. Future biographers, historians of science, and even systematic biologists, may come to appreciate that the following encomium on Hugh Cuming, published five years after his death, was justified:

“Such men as Cuming live after their death, and hence the marvellous increase within a very few years, in our knowledge of Nature, and of God's bounty to the world.”⁷⁶

ACKNOWLEDGEMENTS

It is now more than twenty years since I opened my file on Hugh Cuming and within half a dozen years I had completed most of my research on him. Consequently, it is not easy now to recall and to acknowledge suitably all those who helped me in those early days. Outstanding among them, however, was the late Mr H. C. Weston of Orpington, Kent, a collateral descendant of Cuming's, the results of whose researches into the Cuming family's history were shared freely with me. He was the owner of the lithographed portrait of Cuming reproduced herein, the original remaining in his family. My debt to him goes far beyond a formal acknowledgment.

Dr H. A. Rehder of the National Museum of Natural History, Washington D.C., shared with me the results of his own studies on Cuming and generously gave me most of his own notes. The passages from Cumings's *Polynesian Journal* are reproduced by kind permission of the Chief Librarian of the Mitchell Library, Sydney; and for bringing that *Journal* to my attention I am deeply indebted to Dr N. M. Gunson of the Department of Pacific and South-east Asian History, Australian National University, Canberra.

For permission to reproduce Cuming's letters to Hooker, Bentham and Spruce and other relevant manuscripts in his charge I am grateful to the Chief Librarian of the library of the Royal Botanic Gardens, Kew. To the Chief Librarian of the British Museum (Natural History) I am indebted for permission to reproduce Cuming's letters to Owen and other correspondents. Dr O. Paget of the Naturhistorisches Museum, Vienna, sent me four original letters written by Cuming to Schwartz von Mohrenstern and allowed me to copy and use them. Dr Adolf Zilch of the Senckenberg Museum, Frankfurt, supplied a photocopy of a letter from Cuming to Ruppell as well as copies of two photographs of Cuming.

The following persons helped me in my researches at various times: Mr Gavin Bridson, then of the Zoology Department library, British Museum (Natural History), now Chief Librarian of the Linnean Society of London; Dr Ruth Turner of the Museum of Comparative Zoology, Harvard; Dr Alison Kay of the Department of General Science, University of Hawaii, Honolulu; and Mr Colin Matheson, formerly keeper of Zoology, National Museum of Wales, Cardiff. Undoubtedly there were others whose names now escape me who came to my aid. To these I extend a general acknowledgement, hoping they will forgive as easily as I forget.

NOTES AND REFERENCES

¹ PEATTIE, DONALD CULROSS, 1938. *Green laurels, the lives and achievements of the great naturalists*. Garden City Publishing Co., New York (pp. 136–37).

² REEVE, L. A., 1864. *Portraits of men of eminence*, London, (Vol. 2, p. 41).

³ DANCE, S. P., 1966. *Shell collecting: an illustrated history*. Faber, London, and University of California Press, Berkeley.

⁴ His birthplace is well preserved and has been partly reconstructed.

⁵ For information on Montagu see CLEEVELY, R. J., 1978. Some background to the life and publications of Colonel George Montagu (1753–1815), *J. Soc. Biblioph. nat. Hist.* 8: 445–80.

⁶ The sequence of his early movements in South America is not easy to unravel. In a letter he wrote (? to Woodbine Parish, Secretary of the Geological Society of London), 5 March 1835, he said he arrived at Valparaiso in January 1822 (*Proc. geol. Soc. Lond.* 2: 213, 1838). In a letter to the Trustees of the British Museum, 12 December 1846, he said that a considerable portion of his shell collection had been collected by him during his residence at Buenos Aires and Chile, and during voyages made for the express purpose in the Atlantic Ocean in the year 1821 (and elsewhere at later dates) (*Appendix to the report of the Commissioners to inquire into the constitution and management of the BRITISH MUSEUM*, 1850, pp. 425–35). That Cuming was actively collecting shells while residing at Buenos Aires is suggested by a

comment in REEVE, L. A., 1849, *Conchologia Iconica*, vol. 6, 1849, (Monograph of *Voluta*). Under "*Voluta brasiliiana*" (pl. 15) he writes: "The specimen figured was found by Mr Cuming, buried with others in a bank ... about fifty miles from the sea". Nothing more is known about his natural history activities between 1819 and 1822.

⁷ It was his observations on the situations of certain molluscs relative to tidal levels in the Bay of Valparaiso, both before and after the great Chilean earthquake of November 1822, that urged him to write his letter of 5 March 1835 to the Geological Society of London.

⁸ Valparaiso was a port much frequented by British vessels in those days and would have provided constant work for an industrious sailmaker. Even so, it is difficult to understand how Cuming could have made enough money to retire on after so short a time in business.

⁹ FREMBLY, J., 1827. A description of several new species of Chitones found on the coast of Chili, in 1825; with a few remarks on the method of taking and preserving them. *Zool. J.* 3: 193–205. Frembly was an officer on one of the survey ships under the command of Captains King and Fitzroy.

¹⁰ "So far as I can determine, the *Discoverer* was the first boat designed specifically for the purpose of collecting natural history specimens" (CLENCH, W. J., 1945. Some notes on the life and explorations of Hugh Cuming. *Occ. Pap. Mollusks, Harv.* 1: 17–28, portr.).

¹¹ ST. JOHN, H., 1940. Itinerary of Hugh Cuming in Polynesia. *Occ. Pap. Bernice P. Bishop Mus.* 16: 81–90, portr. The contents of this letter are often at variance with the manuscript Journal.

¹² This manuscript, comprising 134 foolscap pages, is now in the Mitchell Library, Sydney. It is entitled by Cuming himself, "Journal of a Voyage / from / Valparaiso to the Society / and the Adjacent Islands / perform'd / in the Schooner Discoverer / Samuel Grimwood / Master / in the Years 1827 and 1828 / by / Hugh Cuming". The manuscript, evidently not a day-to-day diary, appears to have been written rapidly. From the wording of some passages I conclude that it is a tidied up version of a presumably untidy and travel-worn original.

Grammar and punctuation, never Cuming's strongest points, are treated with gay abandon and he has an infuriating tendency to write "the" for "they" and *vice versa*, but he is seldom obscure. In the passages quoted in this article I have indicated natural breaks between unpunctuated sentences by interpolating wide hyphens. In every other respect the passages are as in Cuming's original.

Regrettably, he is not as informative as he might have been about the natural objects he found and only rarely does he indicate more than the generic name of a particular species. Publication of the entire Journal is now being considered.

¹³ I have bracketed the *currently accepted* names of the places mentioned in the Journal with the exception of one or two which I have been unable to identify.

¹⁴ From this passage it is clear that Cuming was skilled in the art of bartering and had a natural facility in dealing with the native mentality. It also explains why the locality "Isle of Annaa" occurs so often in conchological literature during the nineteenth century (and on many labels accompanying specimens from his collection now in the British Museum (Natural History)).

¹⁵ In Cuming's letter to Hooker he said that he made the island of Rurutu in the Tubuai group south of Tahiti. There is no mention of this in the Journal which usually differs from the letter by being more, not less, informative.

¹⁶ On the lesser evidence provided by Cuming's letter to Hooker this atoll, the type locality of several new molluscan species described from the Cuming collection, has been identified as Fangataufa, lying south-east of Mururoa in the Tuamotus (see DANCE, S. P., 1960. "Grimwood's Island", its geographical position and its connection with Hugh Cuming. *J. Conch. Lond.* 24: 443–45). It had already been discovered, in February 1826, by Captain F. W. Beechey, and probably by others before him.

¹⁷ On the evidence available to me it seems certain that Cuming was the first European discoverer of this group of islands (of which there are actually four: Tenararo, Vahanga, Tenarunga and Maturei-vavao). The first chart of the group was made by Lord Edward Russell, Commander of H.M.S. *Actaeon*, who encountered it on 3 January 1837, though he too named only three of the islands, presumably because Vahanga and Tenarunga were seen as one overlapping stretch of land. Its discovery is usually credited to Captain Thomas Ebrill of the Tahitian trading ship *Amphitrite* who passed on to Mr Biddlecombe, master of the *Actaeon*, information about some islands seen in 1833 in the Tuamotus (see BUCK, P. H., 1953. *Explorers of the Pacific*, Honolulu, pp. 88 and 100). If the *Discoverer* did reach this island group several years before either the *Amphitrite* or *Actaeon* then Hugh Cuming and his aptly named vessel must be written into the history of Pacific exploration and discovery.

18 A typical example of the way Cuming refers to the specimens he collected, rarely allowing positive identification down to species. The mention of a Golden Cowry (*Cypraea aurantium* Gmelin), one of the few references to a particular species in the Journal, is of unusual interest because, as far as I know, this rare mollusc is otherwise unreported from Raiatea (although this island is within its known range).

19 According to the letter to Hooker the date of Cuming's arrival at Pitcairn was 25 May, and according to *The Pitcairn Island Register Book* (Lucas, C. ed., 1929, p. 100) he arrived there 24 May. It cannot be assumed, therefore, that the dates recorded in the Journal are more correct than those recorded in the letter to Hooker. Indeed, the dates in each may sometimes be suspect. The numerous discrepancies between the Journal and the letter indicate that a possibly badly written diary maintained during the voyage could be the common source from which both the Journal and the letter were derived.

20 REEVE, L. A., 1864. *Portraits of men of eminence*, p. 43.

21 Most of the information about this voyage given here is paraphrased from my previous account (see DANCE, S. P., 1966. *Shell collecting: an illustrated history*, pp. 150–51).

22 PERITUS, 1840. *Gardener's Chronicle* 16: 116. Peritus also says: "Mr Cuming had his first ideas of gathering plants from Mr Anderson." By this he must mean that Anderson merely taught Cuming some of the tricks of the plant collector's trade, for Cuming had already collected a great many plants during his Polynesian voyage. According to a manuscript notebook of Anderson's, now in the Botany Library of the British Museum (Natural History), entitled "List of specimens of Plants collected in the Island of Chiloe in 1829–30", Anderson was at Concepción from the latter part of February to the beginning of March 1829. He was at Chiloe Island between August and December 1829. As Cuming is known to have been collecting in Central America in May 1829 it seems likely that he met Anderson at Chiloe Island rather than at Concepción.

23 Cuming is often said to have reached Mazatlán, but he did not go so far north. "Mr. Cuming states that his extreme point north, along the West American coast, was Conchagua, Bay of St. Carlos (or Fonseca): about 13° N.L. In all cases therefore where he is cited as the original collector at places north of this, the authority must be regarded as 'Museum Cuming' "(CARPENTER, P. P., 1857. *Catalogue of the Reigen collection of Mazatlan Mollusca, in the British Museum*, Warrington, p. 23).

24 HOWELL, J. T., 1941. Hugh Cuming's visit to the Galapagos Islands, *Lloydia* 4: 291.

25 Many localities in the vicinity of Valparaiso (and elsewhere) are cited in Hooker's *Botanical Miscellany* vol. 3 (1833).

26 REEVE, L. A., 1849. *Conchologia iconica* 6: (monograph on *Voluta*), (*V. cumingii*).

27 WOODWARD, S. P., 1851–56. *A manual of the Mollusca*, London, p. 429. Probably Cuming developed this technique later when dredging in the Philippines.

28 Clara Valentina Cuming married Martin Stevenson, a boat builder, and lived at Valparaiso. There were two children of the marriage; one of them, Honoria, was born at Valparaiso in 1850. After her father's death Clara went to live at the Villa Solitude, Lourdes, in the Pyrenees. She died there 15 February 1890. Honoria, who died at Lourdes 20 December 1912, had married a Chilean or Spanish national named Guimaraeus by whom she had a son, Martin. It has not been possible to extend the line of Cuming's direct descendants further than this. His last will and testament, dated 10 November 1863, left nearly all the proceeds of his estate to Clara and/or her children. Hugh Valentine Cuming, mentioned in the will as being formerly a Master's Mate on board H.M.S. *Cornwallis* but whose whereabouts in 1863 were unknown, was to receive an annuity of £100 if he were alive to claim it.

29 Caldcleugh was attaché to the British ambassador to Brazil. He wrote *Travels in South America, during the years 1819–20–21; containing an account of the present state of Brazil, Buenos Ayres and Chile*. 2 vols. London, 1825. This book gives a good idea of Chile and especially Valparaiso, as it was when Cuming was there.

30 Hooker Correspondence at Kew, vol. 67 (both letters). Evidently Cuming's arrival had been widely anticipated and created considerable interest. Writing to Miss Susan Horner from London, 2 November 1831, the geologist Charles Lyell shows that it made a big impression in the metropolis: "The great news of the day among the collectors, was the arrival of the long expected sail-maker, Cuming, a man who, having made a little money in trade in Chili, some ten years ago, and fished up a few new shells, which brought in in London six or eight guineas each, took it into his head to build a small sloop, and sail along the American coast and isles of the Pacific, dredging for shells and corals, and observing their habits, as also crustacea and other classes, till he filled four hundred chests of things, numbers of them quite new.

On my return home, I found my chum Broderip glad to see me. After a morning's work, went with

Broderip to the sail-maker's, and found not a few eagles gathered together around the carcass – Lambert, Gray, Children, &c. His treasures only half unpacked, but much that was interesting.” (Lyell, K. M., 1881. *Life letters and journals of Sir Charles Lyell, Bart.* vol. 1, pp. 348–49.)

- 31 The Bentham diaries are preserved at Kew.
- 32 Hooker Correspondence, vol. 65.
- 33 Bentham Correspondence at Kew, Letter 67.
- 34 *Proc. zool. Soc. Lond.* (for 1832): 25–33 (21 April 1832).
- 35 A photograph sent me by Dr Adolf Zilch of the Senckenberg Museum, Frankfurt, shows Cuming contentedly smoking a ‘segar’.
- 36 The full text of this letter is reproduced by MATHESON, C., 1964. George Brettingham Sowerby the First and his correspondents. *J. Soc. Bibliophy nat. Hist.* 8: 214–25.
- 37 Obituary notice of Hugh Cuming in: *J. Bot. Lond.* 3: 325, 1865.
- 38 MERRILL, E. D., 1926. Hugh Cuming's letters to Sir William J. Hooker, *Philipp. J. Sci.* 30: 153–84, portr. The bibliography appended is very extensive and covers references to zoological as well as botanical studies. Merrill worked from copies of the original letters which are all in the Hooker Correspondence at Kew.
- 39 MERRILL, E. D., 1926, *op. cit.* pp. 166–67.
- 40 MERRILL, E. D., 1926, *op. cit.* p. 167.
- 41 MERRILL, E. D., 1926, *op. cit.* pp. 167–168.
- 42 Original letter in the Owen Correspondence, British Museum (Natural History), here published in full for the first time.
- 43 MERRILL, E. D., 1926, *op. cit.* pp. 168–69.
- 44 Original letter in the Ruppell Correspondence, Senckenberg Museum, Frankfurt, here published in full for the first time.
- 45 Original letter in the Owen Correspondence, British Museum (Natural History), here published in full for the first time (minus the unimportant excised passages as indicated).
- 46 This list is copied unaltered from DANCE, S. P., 1966. *Shell collecting: an illustrated history.* p. 154.
- 47 MERRILL, E. D., 1926. *op. cit.* p. 170.
- 48 MERRILL, E. D., 1926. *op. cit.* pp. 170–71.
- 49 MERRILL, E. D., 1926. *op. cit.* pp. 172–73.
- 50 MERRILL, E. D., 1926. *op. cit.* pp. 173–74. Judging by the length and size of his Polynesian Journal this one, compiled over a much longer period, must have been very bulky. Probably Hooker did no more than glance through it.
- 51 An “Indenture” detailing the duties of the Trustees (John Joseph Bennett, Richard Owen, Charles Stokes, William John Broderip and William Yarrell) is preserved in the library of the Zoological Society of London. It is dated 15 March 1837 and refers to an agreement between Cuming and the Society, dated 13 January 1836, concerning the disposal of his shell collection in the event of anything happening to him during his Philippine venture. The first page of the Indenture is reproduced by R. Fish and I. Montagu (p. 31 in: ZUCKERMAN, S., (ed.), 1976. *The Zoological Society of London 1826–1976 and beyond*, London). The accompanying information about Cuming given by Fish and Montagu is unreliable.
- 52 SOWERBY, G. B. (1st, 2nd and 3rd), 1842–87, *Thesaurus conchyliorum, or monographs of genera of shells*, 5 vols, London.
- 53 Extract from the original letter, here published for the first time, bound up in a volume of correspondence by A. Bernardi and others in the British Museum (Natural History) (pressmark 89. f.B.).
- 54 REEVE, L. A., and SOWERBY, G. B. (2nd), 1843–78. *Conchologia iconica: or illustrations of the shells of molluscous animals*, 20 vols, London. Sowerby took over authorship from vol. 15 (monograph on *Pyramidella*) upon Reeve's death late in 1865. He also provided the original drawings (or most of them) and copied them onto the stones from which the lithographs were printed. The copy containing the pattern plates is now in the Museum of Comparative Zoology, Harvard, Massachusetts.
- 55 WOODWARD, S. P., 1861. *Recreative science* 2: 298.
- 56 GOSSE, E., 1890. *The life of Philip Henry Gosse F.R.S.* London, p. 178.

57 GOSSE, E., 1980 *op. cit.* p. 179.

58 Probably Auguste Sallé (1820–96) who went to Mexico after collecting for Cuming in Hispaniola from 1849 to 1851 (CHARDON, C. E., 1949 *Los naturalistas en la America Latina* 1: 206).

59 A copy of this letter is in the Bentham Correspondence, Vol. 2. It accompanies the following letter from Cuming to Bentham, dated 26 April 1856: "According to promise I enclose you the letter for Mr. Spruce in duplicate, and shall feel obliged by your forwarding the duplicate at your next opportunity fearing the first might be mislaid. I have written to that Gentleman in as full a manner as possible about Collecting Shells fearing he may not be well acquainted with that department, and I trust from what I have written that he will be able to procure a large amount of Land Shells, and that it will be a highly advantageous affair to Mr. Spruce in a pecuniary point of view, and shall feel much obliged by your requesting him to forward them home at his earliest convenience."

60 Cuming's difficulties over MacGillivray's failure to redeem his debt are detailed in a letter Cuming wrote to the Australian naturalist Frederick Strange (published in WHITTEL, H. M., 1947. Frederick Strange, *Aust. Zool.* 11: 96–114, portr.).

61 Quoted in CLENCH, W. J., 1945. Some notes on the life and explorations of Hugh Cuming. *Occ. Pap. Mollusks Harv.* 1: 17–28, portr.

62 MELVILL, J. C., 1895. An epitome of the life of the late Hugh Cuming, F.L.S., C.M.Z.S., &c. *J. Conch. Lond.* 8: 59–70, portr. The photographic portrait of Cuming reproduced in this paper appears in several other biographical accounts of him, e.g. those by Merrill (see note 38) and St John (see note 11).

63 The "First portion of the duplicate shells belonging to the late Mr. Hugh Cuming" was auctioned 15 December 1865 (250 lots). The "Second portion" was auctioned 26 and 27 June 1866 (418 lots). The second sale included the residual part of his library, the bulk of which he had already presented to the Linnean Society.

64 ALLINGHAM, E. G., 1924. *A romance of the rostrum*, Witherby, London, p. 41.

65 LAYARD, E. L., 1895. Some personal reminiscences of the late Hugh Cuming. *J. Conch. Lond.* 8: 71–74.

66 One of these lists, in my possession, is made out to Thomas Glover, an English conchologist. Dated 14 October 1858, it is a blue foolscap sheet on which fifty-seven species are listed. A typical entry reads: "19. 1 *Glandina rosea* Central America Broderip". The handwriting is certainly not Cuming's.

67 There are numerous references to Cuming in Darwin's *Journal of researches* (1839), *Living Cirripedia* (1851, 1854), and *Geology of the voyage of the Beagle* (1842–46) (titles as per those given in FREEMAN, R. B., 1965. *The works of Charles Darwin*, Dawsons, London).

68 Owen's letter is reproduced in *Ann. Mag. nat. Hist.* (2) 1: 149–53 (1848).

69 Their letters, together with Cuming's, are contained in a large report on the Cuming shell collection published in the *Appendix to the report of the commissioners to inquire into the constitution and management of the British Museum*, 1850, pp. 425–35. It is possible that Gray's cautious and generally unfavourable comments were responsible for the collection being turned down on this occasion, although the authorities must have been daunted by the high price asked.

70 From 1846 onwards the letters emanating from 80, Gower Street were rarely written by Cuming. The shaky signatures he appended to the letters written to his dictation by his secretary, his daughter or other amanuenses indicate that he found letter writing laborious. Much has been made of his supposed inability to write, a supposition based almost exclusively upon statements by E. L. Layard to the effect that he never saw Cuming write more than his name, that all Cuming's letters to him were written by his secretary, and that he heard Cuming dictate to his employees scores of times (see LAYARD, E. L., 1895. *J. Conch. Lond.* 8: 71–74).

These observations of Layard's, made some years after Cuming's near-fatal illness, are not enough to label Cuming as an illiterate, especially in the light of the information presented in the present article. But they have coloured opinions of him and have led to such statements as the following: "Hugh Cuming was an illiterate sailor, whose history shows him as a man of strong character, a master organiser, and one born to success. He aimed to have the finest collection of shells in the world, and he reached it. Unfortunately, his plans did not regard the advancement of science, and the strong man wastes no energy on aught but the attainment of his object" (HEDLEY, C., 1910. The marine fauna of Queensland. *Aust. Ass. Advmt Sci.* (Section D): 329–71).

⁷¹ His death was registered in the sub-district of North St Giles the next day, the informant being Robert Furley Geale, Cuming's secretary and subsequently a dealer in his own right. The cause of death was given as chronic bronchitis, asthma and anasarca (i.e. general dropsy).

⁷² For a discussion of the controversy surrounding the scientific value of the collection, with special reference to the labels accompanying the specimens in it, see DANCE, S. P., 1966. *Shell collecting: an illustrated history*, pp. 167–70.

⁷³ With sublime insouciance I retailed the legend in the following words: "There can be no doubt, however, that Gray's wife Maria did more to reduce the scientific value of the collection than anyone else. Shortly after its arrival in the museum she removed the eighty-three thousand specimens from the drawers lined with sheet wool on which Cuming had kept them and glued them on to wooden tablets, a standard practice then. But in the process she carried them drawer by drawer across an open courtyard and many labels were blown into wrong places and consequently gummed to the wrong tablets" (DANCE, S. P., 1966. *Shell collecting: an illustrated history*, pp. 169–70).

A *Sunday Times* review of my *Shell collecting* showed how easy it is for legends to get out of hand. Cyril Connolly wrote: "... a Mrs Gray caused a hopeless confusion by separating the eighty-three thousand specimens from their labels" (the review is reprinted in CONNOLLY, C., 1973. *The evening colonnade*, London, pp. 496–99).

This legend was effectively exploded by a more knowledgeable reviewer of my book (DAWSON, W. R., 1967. *J. Soc. Bibliophy nat. Hist.* 4: 284–86).

⁷⁴ It has been described as a "pestilential conchological swamp" (in: CONNOLLY, M. K., 1939. A monographic survey of South African non-marine Mollusca. *Ann. S. Afr. Mus.* 33: p. 51).

⁷⁵ "For purposes of sale or exchange, an unnamed shell was of less value to him than one named, so names were needed for his wares. More time for determination and description was required by careful writers. But worse authors quickly supplied names good or bad, and doubtless better submitted to Cuming's dictation as to what constituted a different species. So the leading conchologists of his generation in England, Gray, Woodward, Forbes, Hanley, and Carpenter, had little or no dealings with Cuming. Gray, indeed, seems to have quarrelled outright. The naming of Cuming's huge collection fell to weaker men – Reeve, the Sowerby's, and the Adams. It has happened that these renamed the same species twice or thrice. The least amount of work necessary to carry the name satisfied them." (HEDLEY, C., 1910. *Aust. Ass. advmt Sci.* (Section D): 329–71.)

It is hardly necessary to say that Hedley would have had great difficulty in substantiating most of these dogmatic assertions. Clench turns the screw a little tighter: "I have read somewhere that Cuming paid a shilling a species to have his shells described. In the days of very short and formal Latin descriptions, such a procedure was a rather profitable venture, particularly when no illustrations accompanied the text." (CLENCH, W. J., 1945. *Occ. Pap. Mollusks Harv.* 1: 17–28.)

To buttress a preconceived notion it is very convenient, but not very scientific, to have read something somewhere.

⁷⁶ EDWARDS, E., 1870. *Lives of the founders of the British Museum*, London, p. 695.