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Early Scientific Expeditions and Local Encounters.
New Perspectives on Carsten Niebuhr
and 'The Arabian Journey'

Proceedings of a Symposium on the Occasion of the
250th Anniversary of the Royal Danish Expedition to Arabia Felix

Edited by Ib Friis, Michael Harbsmeier and Jørgen Bæk Simonsen



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Carsten Niebuhr and James Bruce: Lifted Latitudes and Virtual Voyages on the Red Sea ...?

*Ib Friis*¹

Abstract

In 1791 Carsten Niebuhr published a review of the first two volumes of Bruce's *Reisen zur Entdeckung der Quellen des Nils* (1790). Niebuhr's strongest criticism of Bruce was that he seemed to have plagiarized some of Niebuhr's astronomical observations ("adopted them without examination") and that he had invented conversation long after it had taken place and thereby made serious mistakes. Privately, Niebuhr held more stern and critical opinions of Bruce's work: two of the described voyages on the Red Sea were fictitious. George Annesley, in 1809, and Henry Salt, in 1814, published even stronger critical views of these parts of Bruce's Travels, but in 1831-1832 James Augustus St. John championed Bruce's veracity and criticised Niebuhr. James R. Wellsted, in 1835, defended Bruce's disputed observations on the Red Sea. In newer literature on Bruce's Travels the descriptions of the controversial voyages on the Red Sea are mostly briefly mentioned and shown on maps as facts. George Annesley suggested that the descriptions of the contended voyages, published in 1790, might have been based on a British chart of the Red Sea from 1781, with sources of information ranging from the Portuguese naval officer João de Castro's voyage on the Red Sea in 1540-1541 to Niebuhr's chart and travel accounts. This suggestion is re-examined here: there is striking agreements between the British chart from 1781 and Bruce's accounts and maps, even with regard to factual errors in the former. A letter dated as written by Bruce in 1770 at Gondar, Abyssinia, contains information about latitudes identical with some of Niebuhr's observations which were unpublished in 1770; possible explanations for this are proposed. In summary, it seems that Niebuhr is right; it is almost certain that Bruce plagiarized some of Niebuhr's observations, and it seems unlikely that he sailed south of Qusayr and Luhayyah.

Contributions to this symposium have dealt with a number of travellers who sailed on the Red Sea between 1760 and 1830. Mostly the contributions have

focused on individual travellers, but discussions sometimes touched upon interaction between these travellers, and how they commented on each other's works. This paper deals with interaction between Carsten Niebuhr, James Bruce and other scientific

1. The author would like to thank other participants in the symposium for useful discussions about the subject of this article, in particular Charles W.J. Withers (Wellsted and Bruce), Dieter Lohmeier (Niebuhr and his article on Bruce's *Travels in Neues deutsches Museum*) and Lawrence J. Baack

(Niebuhr, maritime matters, particularly regarding the British navigation on the Red Sea, and comments on various drafts of the text).

travellers in the region, and the exercise can therefore be considered a study of the discipline which Charles W.J. Withers in a previous paper in these proceedings has termed “citationary geography.”²

Carsten Niebuhr published a review of the German translation of the first two volumes of Bruce’s *Travels* in June, 1791.³ The first two volumes of the complete German translation had appeared in 1790, the same year as the two first volumes of the English original. Niebuhr’s review, in German, was generally appreciative with regard to Bruce’s achievements, but critical on many specific points. After the death of Carsten Niebuhr in 1815 his son, Barthold Georg Niebuhr, wrote a long obituary, almost a full-scale biography, in which he, among many other subjects, explained Carsten Niebuhr’s privately held and more critical opinions of Bruce’s *Travels*.⁴ These details were only shortly hinted at in the present author’s main presentation at the symposium, a presentation which focussed on James Bruce’s, Henry Salt’s and Eduard Rüppell’s journeys in the Christian highlands of Abyssinia. But other participants at the symposium had pertaining specialists’ knowledge, and an exchange of information and views developed between Lawrence J. Baack, Dieter Lohmeier, Charles W. J. Withers and the present author, who has since gathered documen-

tation to illustrate these discussions. The editorial committee has thought that a fruitful discussion at the symposium deserved note in a separate paper in the proceedings, even if a formal presentation on the subject was not delivered at the time.

Also George Annesley (Viscount Valentia) and Henry Salt made critical remarks on Bruce’s observations from the disputed Red Sea voyages.⁵ In a collection of biographies of travellers James Augustus St. John published an unusually critical biography of Carsten Niebuhr and championed Bruce’s veracity on the points which had been criticised by Carsten and Barthold Georg Niebuhr, George Annesley and Henry Salt,⁶ while the translator of B.G. Niebuhr’s biography, a certain “Professor Robinson”,⁷ defended Niebuhr’s point of view. James R. Wellsted’s subsequently defended Bruce’s observations and map of the Red Sea.⁸

Bruce’s descriptions of his disputed Red Sea-voyages are often represented in literature from the twentieth century more or less as described in the *Travels*. In an abridged edition of *Travels* Beckingham passes over the voyage south of Qusayr without mentioning it and the voyage is not mapped, but the voyage from Luhayyah to Bab-el-Mandab is mentioned and mapped.⁹ Reid accepts Bruce’s statements on virtually all the points criticized by Niebuhr, passing, however, lightly over the voyage on the Red Sea south of Qusayr, but accepts and maps Bruce’s description of the voyage to Bab-el-Mandab.¹⁰ Hulton, Hepper and Friis focus on the travels over land in Abyssinia (Ethi-

2. The term was taken from Mayhew (2904), pp. 251-276, referring to how travellers, and travel writers, corrected their predecessors and added evidence from their own first-hand empirical encounters. Here the “community” of travellers consists of Carsten Niebuhr, James Bruce, George Annesley, Henry Salt and James R. Wellsted (in chronological sequence), and the traveller and travel writer who is the main subject of the exchanges of opinion is James Bruce.

3. Niebuhr (1791) and Bruce (1790-1791). Niebuhr knew English, but his review of Bruce’s *Travels* seems to be based only on the German translation. B.G. Niebuhr (1816), p. 30 and p. 57, has described how his father learnt English during his long stay in Bombay, kept an interest in that language during the rest of his life and taught it to his son. As pointed out later, one of Niebuhr’s comments on Bruce’s *Travels* (about the distance between Mecca and Jiddah) is based on an error in the German Translation, so probably Niebuhr did not consult the English original for the review.

4. Niebuhr (1816), p. 63.

5. Annesley (1809), see details later.

6. St. John (1832).

7. Detailed footnote in the English translation of B.G. Niebuhr’s biography of his father (Niebuhr 1836); see later.

8. Wellsted (1835).

9. Beckingham (1964). On p. 5 of the Introduction the conversation with Ali Bey is described, without mentioning Niebuhr’s criticism.

10. Reid (1968). On pp. 60-61 Reid describes the conversation with Ali Bey. The voyage south of Qusayr is not mentioned in the appropriate place on pp. 66-67 and not shown on the map on p. 73, but the voyage to the Straits of Bab-el-Mandab is described as an actual event on pp. 70-72 and shown on the map on p. 73.

opia) and pass lightly over the points about which Niebuhr is critical; they do not map the voyage south of Qusayr, but mention and map the voyage to Bab-el-Mandab.¹¹ Bredin, the most recent biographer of Bruce, described and mapped both the two contended voyages.¹²

Carsten Niebuhr and James Bruce travelled in Egypt and on the Red Sea with an interval of approximately six and a half years. The Danish party left Suez in October, 1762, and arrived at Luhayyah in Yemen in December, travelling via el Tûr on the Sinai Peninsula and Yanbu, Jedda and Qunfidah on the Arabian coast. James Bruce and his artist and assistant Luigi Balugani began their travels in North Africa in 1765, when Niebuhr was still in Persia. In April, 1769, Bruce and Balugani set out on a voyage on the Red Sea from Qusayr to the Sinai Peninsula, Yanbu, Jedda and Qunfidah on the Arabian coast to Luhayyah in Yemen and onwards to Massawa on the African coast, where they landed in September, 1769. Niebuhr's published works on Egypt and the Red Sea, in German, appeared in 1772, 1774 and 1778.¹³ There is no evidence that Bruce read German, but we know that he was fully fluent in French, and French translations of Niebuhr's books on Egypt and the Red Sea appeared between 1773 and 1780.¹⁴ Niebuhr's criticism of Bruce's travel account was not translated into French or English before Bruce's death in April 1794, so quite likely it never came to his attention.¹⁵ On the initiative of Bruce's family a second edition of Bruce's *Travels* appeared in 1804 with much additional

material from Bruce's papers and a commentary and biography of Bruce by the Edinburgh scholar Alexander Murray, who was familiar with the Orient and Oriental languages. Murray's edition was republished almost unaltered in 1813.¹⁶

In a paper entitled *The Bruce Controversy* Ullendorff enumerated a long list of critical remarks made about the reliability of Bruce's *Travels* – mainly objections raised during Bruce's own lifetime or shortly after, and mainly dealing with his account of the travels in Abyssinia, Nubia and Egypt. Niebuhr is not mentioned. Ullendorff divides Bruce's critics into three categories: (1) those who doubted that Bruce had been to Abyssinia at all; (2) those who asserted that Bruce's narratives were vitiated by deliberate inventions and falsehoods; and (3) those who found simple exaggerations and inconsistencies in Bruce's work.¹⁷ Niebuhr's published comments fall in category (3), while his privately held opinions might agree with views in category (2).

In the following Niebuhr's criticism is translated in full into English, Bruce's accounts and the criticism of English authors' is quoted in abbreviated form. The quotations are analyzed, particularly with regard to geographical details (which are compared with earlier accounts and maps, contemporary and modern maps and satellite images), and a conclusion is attempted.¹⁸

11. Hulton, Hepper and Friis (1991). The meeting with Ali Bey is mentioned on pp. 12-13, on p. 14 the journey to Bab-el-Mandab is referred to and mapped on p. 41.

12. Bredin (2000). The conversation with Ali Bey is described on pp. 52-53, the voyage south of Qusayr on pp. 62-63, and the voyage to Bab-el-Mandab on pp. 68-69. Bruce's voyages on the Red Sea are shown on the map on p. vi.

13. Niebuhr (1772, 1774, 1778).

14. For example Niebuhr (1776, 1779). Heron's abbreviated English translation of Niebuhr's travel accounts was only published in 1792, after the first English edition of Bruce's *Travels*.

15. Niebuhr's personal opinion of Bruce's appeared in English only in Niebuhr (1836).

16. Bruce (1804, 1813).

17. Ullendorff (1953), pp. 138-143.

18. Apart from the observations by Carsten Niebuhr, James Bruce, George Annesley, Henry Salt and James Wellsted, the sources used for comparison of Niebuhr's and Bruce's localities include the following: The observations of the coasts of the Red Sea made during a voyage from India as far as Suez by the Portuguese naval officer and fourth viceroy of Portuguese India Dom João de Castro in 1541; an English translation of a manuscript of de Castro's work *Roteiro do Mar Roxo* was published in a compilation of voyages by Purchas (1625). The map "Aegyptus Antiqua" and associated description by D'Anville (1765, 1766). The chart of the Red Sea by De La Rochette, published in London by William Faden with additional details from contemporary travellers, including Carsten Niebuhr (De La Rochette 1781). The charts of the Red Sea published immediately after Niebuhr's and

Bruce on Niebuhr

In Bruce's *Travels* there are few references to Niebuhr.¹⁹ In an account of Alexandria: "Mr Niebuhr, whether from one or more observations he does not say, makes the latitude [of Alexandria] to be 31° 12' [N]. From a mean of thirty-three observations, taken by the three-foot quadrant ..., I found it to be 31° 11' 16": ..."²⁰ In a discussion about the geography of Egypt in the Antiquity Niebuhr is mentioned in connection with the correct position of the ruins of Memphis.²¹ A few pages later the purpose of the Danish expedition is discussed at greater length, but not correctly:

After Mr Wood²² and Mr Dawkins²³ had published their Ruins of Palmyra, the late king of Denmark, at his own expence, sent out a number of men, eminent in their several professions, to make discoveries in the east, of every kind, with these very flattering instructions, that though they might, and ought, to visit both Baalbec and Palmyra for their own studies and improvement, yet he prohibited them to so far interfere with what the English travellers had done, as to form any plan of another work similar to theirs. This compliment was gratefully received; and, as I was directly to follow this mission, Mr Wood desired me to return it, and to abstain as much as possible from writing on the same subjects chosen by M. Niebuhr, at least to abstain either from criticising or differing from him on such subjects. I have therefore passed slightly over Egypt and Arabia; perhaps, indeed, I have said enough of both: if any shall be of another opinion, they may have recourse to M. Niebuhr's more copious work; he was the only person of six who lived to come home, the rest

having died in different parts of Arabia, without having been able to enter Abyssinia, one of the objects of their mission.²⁴

In an account of the town of Tor on the Sinai Peninsula:

But, by a draught of Mr Niebuhr, who went from Suez with Mahomet Rais Tobal, his track with that large ship was through the channels, till he arrived at the point where Tor bore a little to the northward of east of him.²⁵

In a discussion about how the Israelites crossed the Red Sea according to the Bible:

It was proposed to Mr Niebuhr, when in Egypt, to inquire, upon the spot, whether there were not some ridges of rocks, where the water was shallow, so that an army at particular times might pass over? Secondly, whether the Etesian winds,²⁶ which blow strongly all summer from the north west, could not blow so violently against the sea, as to keep it back on a heap, so that the Israelites might have passed without a miracle?²⁷

Niebuhr's observations at Mocha are mentioned in the description of Bruce's contended voyage to Bab-el-Mandab:

Mr Niebuhr has contributed much, but we should reform the map on both sides; though there is a great deal done; yet much remains still to do.²⁸ ... For my part, I had no desire at all to land at Mocha. Mr Niebuhr had already been there before us; and I was sure every useful observation had been made as to the country, for he had stayed there a very considerable time, and was ill used. We kept our course, however, upon Mocha town.²⁹

Bruce' maps are by Popham (1804), Annesley (1809) and Wellsted (1835). The Times Comprehensive Atlas of the World (2011) and the satellite images of Google Earth on <http://www.google.com/intl/da/earth/> have also been used; Google Earth was addressed in January-May, 2013.

19. Bruce (1790), Vol. 1, p. 16.

20. Bruce (1790), vol. 1, p. 16; the observation of the latitude of Alexandria is again mentioned on p. 160.

21. Bruce (1790), vol. 1, p. 55.

22. Robert Wood, 1717-1771, British traveller, classical scholar, civil servant and politician.

23. James Dawkins, 1722-1757, British antiquarian.

24. Bruce (1790), Vol. 1, p. 68. This partly erroneous statement is discussed in some detail by Niebuhr; see later.

25. Bruce (1790), vol. 1, p. 227.

26. The Etesian wind is a prevailing and annually recurring summer wind that blows over the Aegean Sea and the eastern Mediterranean.

27. Bruce (1790), Vol. 1, pp. 234-235. Also this statement is mentioned by Niebuhr, see later.

28. Bruce (1790), Vol. 1, p. 268. This refers to the controversial voyage from Luhayyah to Bab-el-Mandab.

29. Bruce (1790), Vol. 1, p. 310.

Niebuhr on Bruce

Niebuhr published a review of Bruce's *Travels* in the learned journal *Neues deutsches Museum*, printed with German black letter typography.³⁰ The text has not been referred to in biographies of Bruce and works on his *Travels* for more than 150 years. In order to make the text readily available to modern readers a complete and annotated translation is given here:

Remarks on the first two volumes of the *Travels* of Mr. Bruce to discover the sources of the Nile.

Mr. Bruce says in the introduction to the account of his journey on p. 64 of the complete German translation: [Here follows a German translation of the citation above from the Introduction to Bruce's *Travels*:³¹ "After Mr Wood and Mr Dawkins had published their Ruins of Palmyra ..."]

Should Mr. Wood really have believed that the King of Denmark had prohibited the travellers to Arabia to study what the English travellers already had worked on? Should Mr. Wood really have expressed a wish to Mr. Bruce, requesting that he should not write about items which I had chosen to deal with and about other opinions I had held? Although the author of these comments may have been well intended towards Mr. Wood and me, he does not pay the two of us a pretty compliment by this remark. A traveller who writes about his observations with no reason to fear the criticisms of his successor would rather want to have his work studied; certainly it is so for Mr. Wood, and I fear no investigation either.

It is completely unfounded that I and my travelling companions were forbidden to investigate what the English travellers to Palmyra and Baalbek had already studied and that studies in Abyssinia had been an objective for our expedition. Neither in the instruction given to us, nor in any of the following orders the King of Denmark had mentioned with one word the antiquities of Palmira and Baalbek, or a journey to Abyssinia. The King had in this whole enterprise no other intention than the progress of the sciences, and therefore the instruction to the travellers has not remained a secret; Mr. Michaelis has himself published his questions to

the expeditions, which everyone can read now. The country, which we should particularly investigate, was *Arabia Felix*, where we should stay for two years, or if it was necessary, three years; the outward journey should take us via Constantinople, Alexandria, Cairo, Suez and Jeddah to Mocha, and on the way back we should travel via Basra, Aleppo and Smyrna. There is no detour proscribed for us, except one from Suez to Mount Sinai, and to the at the time still famous Dsjäbbel el Mokatteb.³²

Had the above mentioned instruction been known to Mr. Bruce, then he would also have been able to conclude that it was not against the Royal Instruction if we verified observations that had already been made by others. The King demanded that his travellers should make correct observations and as far as possible provide the most accurate information about the countries they travelled in; they should, according to their convictions, fearlessly report the truth, but this should be done with humility when their observations disagreed with other observations. §9 of the Instruction says this about conflicting observations made by the different members of the travelling party³³: "If an observation has been entered in his diary by more than one traveller (without prior agreement among those writing the diaries) then this will this cause Us our most gracious pleasure, because this will bring knowledge to Europe about a subject, which two travellers have described from different points of view, and such observations will appear more probable when they have been confirmed by several. ... [Niebuhr's omission of part of quoted text.]

The recommended agreement [between the members of the expedition] does not include that one diary should not contradict another when two travellers describe the same subject: such an opposition, in which courtesy must always guide the pen, is not to be taken up badly by the person opposed, as We most gracefully will consider it a sign of fidelity towards history."

32. The journey to Mt. Sinai in search of Dsjäbbel el Mokatteb is described by Niebuhr (1774), Vol. 1, pp. 209-254.

33. Several draft versions of the Royal Instruction exist, all in German. This text must have been quoted from Carsten Niebuhr's personal copy of the final version, signed by King Frederik V and J.H.E. Bernstorff. It was donated to the Dithmarscher Landesmuseum in Meldorf in 2011 as archive number DLM 26000, see Baack (2013). In some versions of the Instructions the quotation forms the end of § 8, e.g. in the copy published in translation by Rasmussen (1990).

30. Niebuhr (1791).

31. Bruce (1790), Vol. 1, p. 68.

I far from believe that along the way I have travelled there is no longer anything new to be noticed, or that I have not been wrongly informed sometimes when I made my observations. And because Mr. Bruce, when he departed from Europe, possessed a very large store of knowledge, but also because of his travels in Barbary and to Abyssinia he was so well prepared as only rarely a traveller is prepared, so I regret it more that he by a misunderstood courtesy has been deterred from publishing what he has noticed in Egypt and Arabia about objects studied by me, and also that he had to call attention to this his decision.

He has, however, not entirely avoided such objects, and in this he has done well. To this category of observations belong his comments about the succession of the Beys, the rulers of Egypt, about the construction of the pyramids and the passage of the Israelites through the Red Sea in the first volume of his work, pp. 94,³⁴ 106,³⁵ and 280,³⁶ which are quite different from what one will find in the first volume of my *Reisebeschreibung* on pp. 133, 197, 254, and in *Beschreibung von Arabien*, pp. 404, and in the issue of the *Neuen deutschen Museum* of December 1790. Mr. Bruce is of the opinion that Muhammad followed the laws of nature when he allowed the Arabs to take four wives, and on p.333 he proves such an opinion by stating the ratio boys to girls among the children born in the Orient.³⁷ In the *Beschreibung von Arabien*, p. 72, I have attempted to explain this ratio differently. Thus the scholars have the comments of two travellers, and they can choose between them, or even discard both.

The determination of the latitude of Alexandria, Cairo and various locations in the Arabian Gulf [the Red Sea] agrees very precisely with my observations.³⁸ Where we have both made our observations on the firm land there is only a difference of seconds: and for the geographer more is certainly not required. However, the expert would demand to know by which method Mr. Bruce has rectified his quadrant in every place where he used it, but I have looked in the first two volumes in vain for this information. If I were vain, then

the observations of Mr. Bruce made at sea would make me really proud. When I recorded the height of the sun in the meridian at noon on the open sea with my Hadley's octant, and next calculated the latitude, then these observations alone would have been of no use to the geographers. They do not care about at which latitudes someone has been on a certain day in mid-ocean. Therefore I asked for the name of the nearest island or promontory or the name of other strange points on the mainland, and established the specific location of these points through my distance from them. Now, an experienced helmsman is easily satisfied if such an estimate of the distance at sea is exact to a minute or two; it may be useful to future navigators and geographers.³⁹ But Mr. Bruce has in general observed the very same on the spot as I had found by observations in nearby places. This makes me fear that he had sometimes had too much confidence in my observations, and adopted these without examination, and this reminds me again further that it is still uncertain if my estimation by eye and at sea have really been more accurate than that of an experienced helmsman.

The latitude of Jeddah at 28° 0' 1" is obviously a printing or clerical error. According to my observations it is 21° 28'.⁴⁰ It is unlikely that the author observed the longitude of Alexandria in 1769, as he has noted on p. 84, because in that year he was in Abyssinia.⁴¹

Similarly, it is a misprint when the distance between the cities of Mecca and Jeddah on p 326 is stated to be 30 days' journey. The distance is without doubt only 30 English miles (*Beschreibung von Arabien*, p. 358).⁴² The so-

34. Bruce (1790), Vol. 1, pp. 26-28, with general comments about the rule of the Beys in Cairo.

35. Bruce (1790), Vol. 1, pp. 40-42.

36. Bruce (1790), Vol. 1, pp. 229-236.

37. Bruce (1790), Vol. 1, pp. 280-289.

38. See later discussion of the agreement between Niebuhr's and Bruce's latitudes.

39. Niebuhr's work with the determination of latitudes and longitudes has been discussed by a number of scholars, latest by Baack (2013). Niebuhr recorded and calculated his positions to the second, but the positions he published in his books and on his chart of the Red Sea he kept to the nearest minute.

40. Bruce (1790), Vol. 1, p. 293. On Bruce's map, Fig. 2, Jeddah [Gidda] is correctly located at approximately 21° 30' N.

41. Bruce (1790), Vol. 1, p. 16. Niebuhr's statement is not quite correct. In 1769 Bruce and Balugani travelled on the Red Sea, lived in Luhayyah in Yemen, crossed to Massawa and entered Abyssinia.

42. Niebuhr has here consulted the German translation only; in that the German text says "30 Tagereisen" [30 days travel]; the English original, Bruce (1790), Vol. 1, p. 278, has correctly "thirty hours journey."



Fig. 1. Part of Bruce's map of the Red Sea, Egypt, Nubia and Abyssinia, published with all three editions of his *Travels* and showing the area on both sides of the Red Sea south of Qusayr ["Cosseir" on the map]. Reproduced from a copy of Bruce's map in the author's possession.

called "Eve's grave" is not two days' journey to the east of Jeddah (p. 554), but hardly two miles to the north-east of the city (my *Reisebeschreibung*, first volume, p. 258).⁴³

43. The statement about this is identical in the German and the original English edition, Bruce (1790), Vol. 1, p. 510. "Eve ... was buried ... at Jidda. Two days journey east from this place, her grave ... is shewn to this day."

It's just a mistake, when it is said in the Introduction on page 35 that the pilgrims from Morocco travel through Sennaar to Mecca.⁴⁴ In the second volume, p. 298, it is rightly pointed out that from the kingdoms Borni and Asnu ("Nigrizien") come the African caravans, which travel through Sennaar to Mecca.

44. Bruce (1790), Vol. 1, p. xxxvii. It has not been possible to verify this.



Fig. 2. Section of Bruce’s map of the Red Sea, Egypt, Nubia and Abyssinia, published with all three editions of his *Travels* and showing a part of the Red Sea between the coast of Abyssinia (now Eritrea) and Yemen. Bruce’s routes, real and pretended, are indicated by a double line (one unbroken and one stippled). Reproduced from a copy of Bruce’s map in the author’s possession.

It is very unlikely that there should be a Turkish garrison on the island of Kameran, as it is noticed on p. 355 in the first volume. This island was at my time part of the province Loheia (*Beschreibung von Arabien*, p 230), and the Turks have made no conquests in this area since then.⁴⁵

According to p. 338 grapes grow in the mountainous areas of Yemen,⁴⁶ although they do not sufficiently mature to allow wine to be made from them. In fact excellent grapes grow in these areas, and I remember to have heard that this is also the case at Táif and in the

45. Bruce (1790), Vol. 1, p. 309. This refers to a comment Bruce made about a place in connection with the controversial voyage south of Luhayyah; Niebuhr is apparently right in this.

46. Bruce (1790), Vol. 1, p. 290. Since Aksumite time grapes have been cultivated at similar altitudes on the African side of the Red Sea (Philipson 1998).

mountainous areas not far from Mecca (*Beschreibung von Arabien*, p. 374). At the Sheikh of the Jews in Sanaa I have drunk delicious wine that was grown in his own garden. No Christians live in Yemen, and the number of Jews there is not large and these are punished very hard if they sell wine to Muslims, so a traveller in this country cannot buy wine for money.

The pictures of the clothing of male and female Arabs of the tribe of Koreish, living close to Jambo and Loheia, are beautiful, like everything that Mr. Bruce has drawn is fine. Whether they are as true as the pictures of traditional costumes in my itinerary, I cannot say, as maybe my judgment would be considered biased. But I am able to say that I have not heard anything in Hedsjäs [Hejáz] or in Tehama [Tihamah] about Arabs from a tribe called Beni Koreish.⁴⁷

Should the religion of the Greek Church in Alexandria really be the ruling religion in Abyssinia? (Stated on p. 68 of the 2nd volume).⁴⁸ Is it really likely that the Greek Patriarch of Alexandria wrote a letter of admonition in the form of a bull to all Greeks in Abyssinia, in which he said, among other, that they were born slaves of the Turks, and at equal rank with the servants of Mr. Bruce? (Stated on p. 101 in the first volume.)⁴⁹ If this

was written in a letter from a Greek patriarch to his subordinates, then I have failed to understand the character of the Greeks. It also strikes me that Mr. Bruce (p. 344 of the first volume) in Hali has encountered a certain emir Farhan, who was a native Abyssinian, and that Mr. Bruce received the same compliments from him as I've enjoyed from the emir Farhan in Loheia.⁵⁰ (*Reisebeschreibung*, 1st volume, p. 295.) The town of Hali is under the control of the reigning Sheriff of Mecca, and the governors of towns and provinces in his area are called viziers and tend to be Sheriffs by birth; the genuine Sheriffs (and their number in this area is great) are too superior to recognize a government that is lower in rank by birth than themselves. That the reigning Sheriff of Mecca had appointed a native Abyssinian as governor of the border town of Hali is to me entirely unexpected. Mr. Bruce says in the Introduction to the account of his *Travels*, p. 62: "Material collected on the spot was not lacking, and rarely did I put it off to record what happened on each day, recording what speech and reasons that had been given, and they were often written the moment after; therefore I can assure the readers that the interviews are really presented as they occurred, though may often not be the case and they have been recorded some time afterwards."⁵¹

47. Plates, presumably based on drawings made by Luigi Balugani, and engraved and published in Bruce (1790), Vol. 1, at p. 264 and at p. 309 in the original English edition. It has not been possible to identify the origin of these drawings. The Arab tribe that controlled *Mekka* and its *Kaaba* is usually referred to as Quraysh or Quraish.

48. It has not been possible to find the place in *Travels* on which Niebuhr based this statement. Probably it refers to the statement that Abyssinia was christened from the Coptic Church in Alexandria (Bruce 1790, Vol. 1, p. 509). The first recorded Christian missionary in Abyssinia was the Syro-Phoenician Greek, Frumentius, born in Tyre, but he was sent to Abyssinia by the Patriarch of Alexandria.

49. Bruce's text about this is indeed surprising: "... Father Christopher took upon him, with the greatest readines, to manage the letters, and we digested the plan of them ... [they should include] an admonitory letter to the whole of the Greeks then in Abyssinia, in form of a bull. ... before it could be supposed they had received instructions from me, they should make a declaration before the king [of Abyssinia], that they were not in condition equal to me; that I was a free citizen of a powerful nation, and servant of a great king; that they were the born slaves of the Turk, and, at best, ranked but as would my servants; ..." See Bruce (1790), Vol. 1, p. 35. The contents of the letter sounds improbable. It is not mentioned

by Murray as being preserved among Bruce's papers from the *Travels* (Bruce 1805, 1813, Vol. 1, Appendix 1-41).

50. Circumstantial evidence supports that Bruce has used name and some of the description of his Emir Farhan in Qunfidah from Niebuhr's Emir Farhan in Luhayyah. Bruce describes his Emir Farhan as a ruler in Konfodah: "Konfodah ... is a small village ... The Emir Farhan, governor of the town, was an Abyssinian slave, who invited me on shore, and we dined together on very excellent provision, dressed according to their custom. ... in his courtyard [there were] about threescore of the finest horses I had for long time seen. We dined ... in a small saloon strowed with Indian carpets; the walls were covered with white tiles ..." (Bruce 1790, Vol. 1, pp. 297-298). According to Niebuhr, who visited Qunfidah seven years before, in 1762, the residence of the governor of that town was strikingly different: "Qunfidah is a sizable, but badly built town. The houses are huts only ... The governor of Qunfidah is only dependent on the Sheriff of Mekka ... He lives on the previously mentioned little island [southwest of the town], but has to go to the town every day in order to sit in the custom house." (The present author's translation from Niebuhr 1774).

51. The passage is here quoted directly from Bruce's original English text (Bruce 1790, Vol. 1, pp. lxx-lxxvi); the German translation agrees with the English text.

Therefore we can doubt the reliability of this or that observation made by Mr. Bruce, and make them subject to closer examination; however, I do not think that anyone has the right to contradict him outright if he speaks as an eyewitness, unless one can prove the contrary by other credible witnesses, and that has an author of travel accounts only rarely to fear.

But what if Mr. Bruce had suffered from lapse of memory in the preparation of his work? It appears to his attentive reader that it must surely have happened at least with regard to conversations in Egypt that he has lacked material collected on the spot, as he informs us about an interview, which is obviously forged and can only have been made several years later.

At the arrival of Mr. Bruce to Cairo in the beginning of the month of July, 1768, Ali Bey ruled over all of Egypt and gave Mr. Bruce letters of introduction to Upper Egypt, Jambo and Jeddah, yes, even to Mecca, which during his journey promoted and protected him from the insolence of the governors and custom-house officers.⁵² His acquaintance with Ali Bey was secured by his knowledge of medical science and astronomy. This could happen because Ali Bey wanted to become independent of the Porte, and his greatest wish was to be able to contribute somehow to the overthrow of the Ottoman Empire; at the time this seemed to be possible, because the Russians had burned the Turkish navy in the harbour of Chesme⁵³ and throughout the Archipelago⁵⁴ found no resistance. However, Ali Bey wanted to know beforehand what Heaven would have decided for him and for the Ottoman Empire. Risk, secretary of Ali Bey, having learnt that a European had arrived at Alexandria with many astronomical instruments and drawing the conclusion that the European would also be a great astrologer, visited Mr. Bruce soon after his arrival to Cairo in July, 1768, and late one evening he led him to the Bey, who asked him if he had calculated from the stars what would be the consequences of the war (between the Turks and the Russians)? And he fur-

ther desired to know if Constantinople would be burnt or captured?⁵⁵

That the Orientals have taken Mr. Bruce for an astrologer, I think not unlikely. It also happened to me, when I observed the stars, that I was taken for a physician and an astrologer. In the Orient there is nothing to earn from astronomy. However, astrology is often required, although practicing it is not as lucrative as medicine. The Sheriff of Mecca would check with me if he would win the war against his brother. Another distinguished man of Mecca demanded that I should reveal to him the identity of a thief who had stolen a few hundred ducats (*Reisebeschreibung*, 1st volume, p 275). In Poland a Jewish woman, who was among the spectators when I had set up my quadrant, requested me to ask the stars if her daughter, who was also present, would soon marry. In the Orient it is for questions like this that people watch the stars.

But how could Ali Bey ask Mr. Bruce already in July, August or September 1768 about the consequences of a war that was unexpectedly declared only in October 1768 by Constantinople and on the 4th of December, 1768, by St. Petersburg? How could Mr. Bruce in 1768 have been talking about the burning of the Turkish fleet, an event which did not take place until 7th of July, 1770? Do these examples not show that he did not take notes about his conversation with Ali Bey until after his return, after having forgotten about the political situation in Egypt at his first visit?⁵⁶

The main purpose of Mr. Bruce's trip was to get exact knowledge about Abyssinia, and to introduce us to this in many ways very strange land. And I, for my part, believe that what he says about it in the several small treatises at the end of the first volume and in the history of the country which almost completely fills the second

52. Bruce (1790), Vol. 1, p. 40-41.

53. The naval battle at Çeşme between Turkish and Russian vessels took place between the 5th and 7th of July, 1770, near and in the Bay of Çeşme (Chesme or Chesma), in the eastern part of the Aegean Archipelago near the peninsula at Smyrna (Izmir) and opposite the island of Chios. It was part of the Russian-Turkish War of 1768-1774.

54. The Aegean Archipelago.

55. The Russian-Turkish War of 1768-1774 resulted in the incorporation of Ukraine, Northern Caucasus, and Crimea in the Russian Empire. The war had no clearly defined starting point because the tension was gradually building up, but on the 6th of October, 1768, the Turkish Sultan imprisoned the entire staff of the Russian embassy at Istanbul, which marked the Turkish declaration of war on Russia. This had been preceded by widespread unrest in Turkish dominated areas with tacit support from the Russian Empire.

56. Niebuhr's assumption regarding this specific point agrees well with the extent to which Bruce relied on memory. This is described by Murray, the editor of the second edition of *Travels* (Bruce (1804), Vol. 1, p. clxxvi).

volume is of the greatest importance. But I must leave the closer examination of it to men who have more accurate knowledge about Abyssinia known than I have: and I would regret if one found also reasons to doubt the reliability of information about that country.

Niebuhr [translated from German by the present author].

In the biography of his father, B.G. Niebuhr described Carsten Niebuhr's reaction to Bruce's *Travels* in less guarded words than those quoted above, but still Niebuhr's attitude is that of respect for Bruce's study of Abyssinia:⁵⁷

The appearance of the long expected Travels of Bruce was an important event in our monotonous life. My father never belonged to that class of excessive doubters, who were ready to contend that Bruce had never been in Abyssinia at all. He read the book without prejudice; and his judgment was precisely that which has since been confirmed, without farther revision, by the second Edinburgh edition⁵⁸ and by Salt's two journeys [to Abyssinia].⁵⁹ In an article inserted in the new *Deutsches Museum*, he shewed that Bruce had taken the pretended determinations of the latitude on the Arabian gulf directly from him [*i.e.* from Niebuhr's publications]; that the conversation with Ali Bey was palpably an invention; and so too the pretended voyage over the Red Sea to the region about Bab-el-mandeb, as also a similar one along the coast southward from Cossir. He [Niebuhr] further declared that, along with these gross untruths, other parts of the Travels bore the stamp of entire credibility, and must be believed.

57. Niebuhr (1816). The text quoted here is that of a translation published in English (Niebuhr 1836) which agrees with the original German text. In this text B.G. Niebuhr repeatedly underlined his father's simple and straightforward ways. It is not possible to say if the stronger words about Bruce in this text are the words of C. or B.G. Niebuhr. The younger Niebuhr would sometimes use harsher words than his father. Yet it seems likely that the basic opinion expressed here is that of C. Niebuhr.

58. Bruce (1804), with additional material, selected from Bruce's papers and comments by the editor, A. Murray.

59. In 1802-1806 and 1809-1811.

Bruce's descriptions of the voyage on the Red Sea south of Qusayr

The first of Bruce's two contended voyages on the Red Sea, which B.G. Niebuhr refers to in the above quotation from 1816 and which Carsten Niebuhr considered fictitious, went south of Qusayr. The description of this voyage in *Travels* has not been republished since 1813,⁶⁰ and the following extracts are selected to give place names and dates and an idea of the general feeling of Bruce's lively and detailed narrative.⁶¹ Notes have been added to give cross references to other authors and to explain the topography as it appears on modern maps and satellite images:

... I chose a man who had been twice at these mountains of emeralds; with the best boat then in the harbour, and on Thursday the 14th March, we sailed, with the wind at north-east, from the harbour of Cosseir [Qusayr] about an hour before the dawn of day. ... Our vessel had one sail, like a straw mattress, made of the leaves of a kind of palm tree, which they call Doom.⁶² It was fixed above, and drew up like a curtain, but did not lower with a yard like a sail; so that, upon stress of weather, if the sail was furled, it was so to heavy, that the ship must founder, or the mast be carried away. But, by the way of indemnification, the planks of the vessel were sewed together, and there was not a nail, nor a piece of iron, in the whole ship; so that, when you struck upon a rock, seldom any damage ensued. ...⁶³ On the 15th, about nine o'clock, I saw a large high rock, like a pillar, rising out of the sea. At first I took it for part of the Continent: but as we advanced nearer to it ... I took an observation, and, as our situation was lat. 25° 6', and the island about a league distant, to the S.S.W. of us, I concluded its latitude to be pretty exactly 25° 3' north.⁶⁴ This island is about three miles

60. Bruce (1813), the third edition of *Travels*, also edited by Murray.

61. Bruce (1790), Vol. 1, pp. 204-217.

62. The Doum palm, *Hyphaene thebaica* (L.) Mart.

63. In a manuscript note of 1770 Bruce made exactly the same comment about the ship on which he travelled from Qusayr towards Ras Mohamed on his journey towards Luhayyah (Bruce 1804, Vol. 1, p. cclxxii-cclxxx).

64. Bruce's description and map of the "Emerald Island" do not agree with the actual geography of the area and does not

from the shore, of an oval form, rising in the middle. It seems to me to be of granite; and it is called, in the language of the country, *Jebel Siberget*, which has been translated the Mountain of Emeralds ... and though the Arabic translation is *Jibbel Zumrud* ... yet I very much doubt, that either *Siberget*, or *Zumrud*, ever meant emerald in the old times. ... The 16th, at day-break in the morning, I took the Arab of *Cosseir* with me, who knew the place. We landed on a point perfectly desert; at first, sandy, like *Cosseir*, afterwards, where the soil was fixed, producing some few plants of rue or absinthium. We advanced above three miles farther in a perfect desert country, with only a few acacia-trees here and there, and came to the foot of the mountains. I asked my guide for the name of the place; he said it was *Saiel*. They are never at a loss for a name, and those who do not understand the language, always believe them. ... He knew not the name of the place, and, perhaps, it had no name, but he called it *Saiel*, which signifies a male acacia-tree; merely because he saw an acacia growing there ... At the foot of the mountain ... are five pits, or shafts from which the ancients are said to have drawn the emeralds. We were not provided with materials, and little endowed with inclination, to descend into any one of them ... I picked up the nozzles, and some fragments of lamps, like those of which we find millions in Italy: and some worn fragments, but very small ones, of that brittle green crystal,

seem to be based on a single previously published source. Bruce describes a tall granite island, “like a pillar, rising out of the sea,” which he calls “Emerald Island”, “*Jebel Siberget*” or “*Jebel Zumrud*”. On Bruce’s map (Fig. 1) the island is called “Emerald Island” and is marked at approximately 25° 03’ N, while a mountain called “*Jebel Zumrud*” is indicated on the mainland almost opposite the island. In approximately the place where Bruce’s has indicated his “Emerald Island” the chart of De La Rochette (1781) shows an island marked “Bahuto, sandy island”, based on information from João de Castro, who visited the place in 1541 (Purchas 1625, pp. 1136-1137). Wellsted (1835) states that he is of the opinion that Bruce’s “Emerald Island”, indicated as being at 25° 2’ N, is “Wady *Jemâl*” at 25° 43’ N. Satellite images of Google Earth show no island at Bruce’s exact position of his high, rocky “Emerald Island” but approximately 40 km to the south, located just off the African shore, there is a low, sandy island called *Wadi El Gemal Island*. The description of Bruce’s “Emerald Island” is confused with the actual topography of *St. John’s Island*, see below. See also Table 1.

which is the *Siberget* and *bilur* of Ethiopia, perhaps the *zumrud*, the *smaragdus* described by Pliny, but by no means the emerald, known since the discovery of the new world, ...⁶⁵ Having filled my curiosity as to those mountains, without having seen a living creature, I returned to my boat, where I found all well, and an excellent dinner of fish prepared ... In this disposition we sailed about three o’clock in the afternoon, and the wind flattered us so much, that the next day, the 17th, about 11 o’clock, we found ourselves about two leagues a-stern of a small island, known to the pilot by the name of *Jibbel Macouar*.⁶⁶ This island is at least four

65. The ancient emerald mines at approximately this location have been mentioned in literature since the Antiquity. On Bruce’s map (Fig. 1) there is a place called *Sial*, presumably identical with *Saiel*, near the coast on the mainland at approximately 24° 45’ N. On his map of “*Aegyptus Antiqua*” D’Anville (1765) has indicated “*Samaragdus M.*” near the coast at approximately 24° 50’ N. João de Castro mentioned a place on the coast called “*Cial*” at approximately the position of Bruce’s “*Sial*” (Purchas 1625, pp. 1136-1137), and the chart of De La Rochette (1781) indicates the name *Sial* at the same place as “*Sial*” on Bruce’s map. Today the ancient emerald mines of *Wadi Sikait* and *Wadi El Gemal* are part of or adjacent to the modern *Wadi El Gamal National Park*, extending along the Red Sea coast between 24° 06’ and 24° 51’ N. On his chart of the Red Sea Niebuhr (1772) indicates a “*Dsjäbbel Sümrud*” on the African mainland at 25° 54’ N; this he observed from far away on the Red Sea and the mountains are indicated as being behind an otherwise vaguely defined coastline. Niebuhr’s “*Dsjäbbel Sümrud*” agrees well with the chart of De La Rochette (1781), where mountains called “*Gebel Sumrud, Hill of Emeralds*” are indicated at approximately 25° 50’ N. See also Table 1.

66. *Jibbel Macouar* is marked on Bruce’s map (Fig. 1) at approximately 24° 03’ N near an unnamed, rather blunt promontory. Further at sea and at approximately 23° 50’ N is marked a smaller island named “*Marys Island*” presumably named after Bruce’s second wife, whom he met after his return from the travels. Still further from the shore is a larger island at approximately 23° 45’ N named “*Bruce’s Island*”. The chart of De La Rochette (1781) shows these localities in a way almost identical with Bruce’s map, but the names of the localities are different. De La Rochette calls the blunt promontory “*Râs el Enf* or *Cape Nose*”, as mentioned in Bruce’s text (but not on his map), the island at the position of Bruce’s “*Jibbel Macouar*” is a flat island called “*Emerald or Amil Island*”, the view from the sea of this island is also shown on the chart. Then follows two small islands marked by De La Rochette at approximately

Table 1. Comparison between names for localities at Ras Bánâs as indicated by travellers and cartographers mentioned in the text and indicated on modern maps

João de Castro	De La Rochette	Bruce (text)	Bruce (map)	Wellsted	Present maps
-	Gebel Sumrud, Hill of Emeralds (At c. 25° 50' N)	-	-	-	Not identifiable
Bahuto	Bahuto, Sandy Island	Emerald Island, Jebel Siberget, Jebel Zumrud 25° 02' N	Emerald Island	Wady Jemâl (25° 43')	Wadi El Gemal, Wadi Jimâl [a low, sandy island]
Cial	Sial	Saial	Sial	Sael, Sâhel	Not identifiable as a locality
Xuarit	Island Shuarit Rock above water	-	-	-	? Jazirat Syul
Ras-el-naxef Râs-el-Nashef	Ras el Enf, or Cape Nose Ras el Nashef, or Dry Head	Ras el Anf, Cape of the Nose	Not named	Cape Nose, Ras Bemess or Ras el Anf	Ras Bánâs, or Ras el Anf
-	Emerald or Amil Island	Jibbel Macouar	Jibbel Macowar	Jebel Macowar cited from Bruce	Not identifiable
Cornaqua	Konnaka, called also the Lizard, a sandy island	-	Mary's Island	-	Sirnaka
Zermorgete	Zemorjete, or St. John's Island High and barren	Jubbel	Bruce's Island 23° 38' N	St. John's or Bruce's Island 23° 37' N	Zabergad, Zebirget, or St. John's Island

the position of Bruce's "Marys Island;" one of the two islands is called "Konnaka, called also the Lizard," the other is an unnamed "Sandy Island." Even further from the shore, De La Rochette has at the position of "Bruce's Island" (on Bruce's map) an island called "Zemorjete or St. John's Island, High and Barren." For this part of the coast De La Rochette's information can be seen to rest closely on the description given by João de Castro (Purchas 1625, pp. 1136-1137): "Konnaka" is identical with de Castro's "Cornaqua" or "Connaqua", and De La Rochette's "Zemorjete, or St. John's Island" with de Castro's "Zermogete." On satellite images (Google Earth) a low, small island, Sirnaka, at 23° 50' 05" N, 38° 48' 27" E, has approximately the position of "Mary's Island" or "Konnaka". The high, rocky Island now called Zabergad or St. John's Island, at 23° 36' 30" N, 36° 11' 40" E, has the position of Bruce's "Jubbel" and "Bruce's Island" or De La Rochette's "Zemorjete, or St. John's Island". See also table 1.

miles from the shore and in a high land, so it may be seen, I suppose, eight leagues at sea, but is generally confounded with the Continent. I computed myself to be about 4' of the meridian distant when I made the observation, and take its latitude to be about 24° 2' on the centre of the island.⁶⁷

The land here, after running from Jibbel Siberget to Macouar, in a direction nearly N.W. and S.E. turns round in the shape of a large promontory and changes its direction to N.E. and S.W. and ends in a small bay or inlet; so that, by fanciful people, it has been thought to resemble the nose of a man, and is called by the Arabs,

67. This does not agree with the topography. The only high island approximately "four miles from the shore" at approximate this position is St. John's Island. See also table 1.

Table 2. Comparison between names for localities between Luhayahh and Bab-el-Mandab as indicated by travellers and cartographers mentioned in the text and indicated on modern maps.

De La Rochette	Bruce (text)	Bruce (map)	Wellsted	Present maps
Urmuk	Ormook	Not marked	-	Urmoc
Resab	Rasab	Rasab	-	Not identifiable
Khameran	Camaran 15° 39' N	Camaran	Kamarân 15° 20' 12" N	Camaran
Pirom, a low white island, also named Sundo	A low, round island	Not marked	-	-
Cape Israel	Cape Israel	Not marked	-	Ras Issa
Gebel Zekir	Jibbel Zekir	Jibbel Zekir	-	Jebel Zucur
Gebel Arroë	Jibbel el Ourèe	Jibbel el Ourèe	-	Hanish
Pilot's Island	Pilot's Island	Not marked	-	? Shykh Malu Island
Perim or Mehun	Perim	Perim	Island of Babelmandeb	Perim
Cape Babelmadel	'One of the Capes of the Straits of Babelmandel'	Cape Babelmandeb	Cape Bâbel Mandeb 12° 42' 20" N	Cape Bab el Mandeb
Assab	Azab	Azab	-	Assab
Crab Island	Crab island	Crab Island	Crab Island 13° 03' 10" N	? Sanahbor Desêt

Ras el Anf, the cape of the Nose. ... [A long discussion about wind directions and stream in the Red Sea follows]. ... [The text continues with a description of Arabian boats crossing from the African to the Arabian side of the Red Sea at Ras el Anf:] Arrived at this island, they set their prow towards the opposite shore, and cross the channel in one night, to the coast of Arabia, being nearly before the wind. The track of this extraordinary navigation is marked upon the map, and it is so well verified, that no shipmaster need doubt it.⁶⁸

68. Bruce's "Ras el Anf, Cape of the Nose", is apparently de Castro's "Ras-el-naxef", named "Râs el Enf or Cape Nose" on De La Rochette's chart, but both de Castro and De La Rochette have another promontory "Ras-el-naxef" or "Râs-el-Nashef" further to the south-west. Detailed satellite images (Google Earth) show only one promontory, now called Ras Banas, with its point at 23° 53' 30" N, 35° 47' 24" E. Wellsted

The island, Macouar, has breakers running off from it at all points; but, though we hauled close to these, we had no soundings. ... About sun-set, I saw a small sandy island, which we left about a league to the westward of us. It had no shrubs, nor trees, nor height, that could distinguish it.⁶⁹

My design was to push on to the river Frat,⁷⁰ which is

(1835) states that Bruce has located "Ras el Anf, or Cape Nose" at 24° 3' N, but the cape is not named on Bruce's map; in fact the cape is at 23° 54' N. See also Table 1.

69. The description of "the island, Macouar" as having "breakers running off from it at all points" does not agree with any modern topography. The observation of no sounding near the breakers is not likely. The chart of De La Rochette (1781) indicates no soundings in this whole area, but that seems to be due to lack of information.

70. According to De La Rochette (1781) a wadi at approximately 21° 17' N is called "R. Farat". In spite of the

represented in the charts as very large and deep, coming from the Continent; though, considering by its latitude that it is above the tropical rains (for it is laid down about $21^{\circ} 25'$), I never did believe that any such river existed. [A discussion about rivers follows, in that part of the world they all raise within the area of the tropical rains]. It would be a very singular circumstance, then, that the Frat should rise in one of the driest places in the globe; ... On the 18th, at day-break, I was alarmed at seeing no land, as I had no sort of confidence in the skill of my pilot, however sure I was of my latitude. About an hour after sun-set, I observed a high rugged rock, which the pilot told me, upon inquiry, was Jubbel (viz. a Rock), and this was all the satisfaction I could get. ... ⁷¹ All this morning since before day, our pilot had begged us to go no farther. He said the wind had changed; and ... in twenty-four hours we should have a storm. ... [Here follows a description of how the boat is turned. On the 19th he is back at "Jebel Siberget." Shortly after, a storm came, and a description of the storm follows].⁷²

The vessel went at a prodigious rate. The sail, that was made of mat, happened to be new, and filled with a strong wind, weighed prodigiously. What made this worse was, the masts were placed a little forward. The first thing I asked was, if the pilot could not lower his main-sail? But this we found impossible, the yard being faxed to the mast-head. The next step was to reef it, by hauling it, in part, up like a curtain: This our pilot desired us not to attempt; for it would endanger our foundering. ... I began now to throw off my upper coat and trowsers, that I might endeavour to make shore, if the vessel should founder, whilst the servants seemed to have given themselves up, and made no preparation. ... Every ten minutes we ran over the white coral banks, which we broke in pieces with a noise similar to the grating of a file upon iron ... About two o'clock the wind seemed to fail, but, half an hour after, was more violent than ever. At three it fell calm ... We now saw

doubt Bruce expresses, he has indicated Frat at the coast at approximately $21^{\circ} 50'$ N. It has not been possible to identify these names and places with modern names or places at that part of the Red Sea Coast.

71. This description agrees with the view from the sea of St. John's Island, "Bruce Island" on Bruce's map.

72. In a manuscript note of 1770 Bruce has described similarly violent storms while he and Balugani were staying at Qusayr (Bruce 1804, Vol. 1, p. cclxxii-cclxxx).

distinctly the white cliffs of the two mountains above Old Cosseir; and, on the 19th, a little before sun-set, we arrived safely at the New.

Bruce's descriptions of the voyages on the Red Sea between Luhayyah and Bab-el-Mandab

Bruce described the other disputed voyage between Luhayyah and Bab-el-Mandab very vividly and with a lot of detail, and for the same reasons as given above for the voyage south of Qusayr, a range of extracts with place names and dates are cited here:⁷³

On the 27th [July], at five o'clock in the morning, we parted from Loheia, but were obliged to tow the boat out. About nine, we anchored between an island called Ormook,⁷⁴ and the land; about eleven, we set sail with a wind at north-east, and passed a cluster of islands on our left. The 28th, at five o'clock in the morning, we saw the small island of Rasab;⁷⁵ at a quarter after six, we passed between it and a large island called Camaran,⁷⁶ where there is a Turkish garrison and town and plenty of good water. At twelve, we passed a low round island, which seemed to consist of white sand.⁷⁷ The weather

73. Bruce (1790), Vol. 1, pp. 308-325.

74. Ormook, or Urmuk, is not shown on Bruce's map (Fig. 2). On the maps of Yemen in Niebuhr (1772) and the chart by De La Rochette (1781) this island is shown and named Urmuk; it is now known as Al Murk or Al Marak and is located at $15^{\circ} 37' 55''$ N, $42^{\circ} 36' 45''$ E, only about 10 km SW of Luhayyah. Generally, Bruce indicates the distances to the islands south-west of Luhayyah longer than on modern maps. See also Table 2.

75. Rasab is shown on Bruce's map (Fig. 2) and, named Resab, on the chart by De La Rochette (1781). De La Rochette indicates Resab to the north-west of Kameran, as in Bruce's text, while Bruce's map has it to the South of Kameran. No island with a name or a position matching Rasab has been seen on modern maps. See also Table 2.

76. Kamaran or Camaran is a large island south-west of Luhayyah between $15^{\circ} 15' 39''$ and $15^{\circ} 27' 18''$ N and $42^{\circ} 32' 00''$ and $42^{\circ} 38' 49''$ E. Its size is surprisingly small on Bruce's map (Fig. 2). See also Table 2.

77. On the chart of De La Rochette (1781) an island called "Pirom, a Low White island, named also Sundo" is indicated south of Kameran and north-west of "Cape Israel". It is not marked on Bruce's map.

being cloudy, I could get no observation. At one o'clock, we were off Cape Israel.⁷⁸ ... my Rais [pilot] said, that we better stretch over to Azab,⁷⁹ than run along the coast in the direction we were now going, because, somewhere between Hodeida⁸⁰ and Cape Nummel,⁸¹ there was foul ground, which he should not like to engage in the night. Nothing could be more agreeable to me; for though I knew the people of Azab were not to be trusted, yet there were two things I thought I might accomplish, ... The one was, to learn what those ruins were that I had heard so much spoken of in Egypt and at Jidda, and which are supposed to have been the works of the queen of Sheba, whose country this was;⁸² the other was to, to obtain the myrrh and frankincense tree, which grow on that coast only, but neither of which had, as yet, been described by any author.⁸³

At four o'clock we passed a dangerous shoal, which is the one I suppose our Rais was afraid of. ... At sun-set we

saw Jibbel Zekir,⁸⁴ with three small islands, on the north side of it. At twelve at night the wind failing, we found ourselves about a league from the west end of Jibbel Zekir, but it then began to blow fresh from the west; so that the Rais begged liberty to abandon the voyage to Azab and to keep or first intended one to Mocha. For my part, I had no desire at all to land at Mocha. Mr Niebuhr had already been there before us; and I was sure every useful observation had been made, as to the country, for he had staid there a very considerable time, and was ill used. We kept our course, however, upon Mocha town. The 29th, about 2 o'clock in the morning we passed six islands, called Jibbel el Ourèe [near Mocha. Then, omitted here, follows a description of the town of Mocha].⁸⁵ ... On the 30th, at seven o'clock in the morning, with a gentle but steady wind at west, we sailed for the mouth of the Indian ocean. ...

The coast of Arabia, all along from Mocha to the Straits, is a bold coast, close to which you may run without danger, night or day. We continued our course within a mile of the shore, where in some places there appeared to be small woods, in others a flat bare country, bounded with mountains at a considerable distance. ... About four in the afternoon, we saw the mountain which forms one of the capes of the Straits of Babelmandel, in shape resembling a gunner's quoin. ... The 31st, at nine in the morning, we came to an anchor above Jibel Raban, or Pilot's Island, just under the cape ...⁸⁶ [A lively and detailed description of an improvised dinner consisting mainly of fish from the Red Sea follows here]. At noon, I made an observation

78. The "Cape Israel" of De La Rochette (1781) and Bruce's text is now known as Ras Issa (not marked on Bruce's map, Fig. 2); at 15° 12' N; 42° 40' E, it is the largest peninsula along the coast of Yemen north of Bab-el-Mandab. It is only approximately 50 km SW of Luhayyah. See also Table 2.

79. Assab on the African coast; 13° 00' 33" N; 42° 44' 22" E. Assab was an important harbour near Djibouti from ancient time up to the present. See also Table 2.

80. Al Hudaydah, an important port on the coast of Yemen at 14° 48' N, 42° 57' E.

81. It has not been possible to trace Bruce's "Cape Nummel". It would seem to be a promontory south of Al Hudaydah. On the chart of De La Rochette (1781) a "Cape Namel or Kasmadgemel" is indicated on the Red Sea coast at 14° 15' N, which agrees with the position of a "Dangerous Bank" in the Red Sea mentioned in the text, but on Bruce's map (Fig. 2) a "Ras Nummal" is indicated on the coast between Luhayyah and Al Hudaydah. See also Table 2.

82. See later Bruce's assumptions about the residence of the Queen of Sheba at Assab.

83. Linnaeus had at that time (Linnaeus 1764) already described the tree producing myrrh, based on material sent from Yemen by Forsskål, but the publication appeared after Bruce had left Europe. Bruce states: "Among the myrrh-trees behind Azab, all along the coast to the Straits of Babelmandeb, is its native country." It is said to be planted in Arabia. "The first plantation that succeeded seems to have been at... Beder Hunein [Badr Hunayn], whence I got one of the specimens from which the present drawing is made." (Bruce 1790, Vol. 5, pp. 16-26).

84. "Jibbel Zekir" is presumable Al Zukur, the northern of the large Hanish Islands. About 90 km north-west of Mocha. See also Table 2.

85. Bruce's "Jibbel el Ourèe" agrees with the southern group of the Hanish Islands. On the chart by De La Rochette (1781) there is a group of five or six islands of almost the same size, indicated as "Gebel Arroë". Bruce's map (Fig. 2) shows one island, "Jibbel el Ouree", of almost the same size as Al Zukur. Modern maps and satellite images show that one island, Hanish, in the southern group is much larger than the others. See also Table 2.

86. The topographical information agrees exactly with the chart of De La Rochette (1781), including the name and position of the "Pilot's Island." The chart indicates a small island as in Bruce's text, but Bruce's map (Fig. 2) does not mark this little island. The "Pilot's Island" seems to be identical with a small island at 12° 40' 30" N, 43° 27' 34" E, now called Shykh Malu Island. See also Table 2.

of the sun, just under the cape of the Arabian shore, with a Hadley's quadrant, and found it to be in lat. $12^{\circ} 38' 30''$; but by many passages of the stars, observed by my large astronomical quadrant in the island of Perim,⁸⁷ all deductions made, I found the true latitude of the cape should be rather $12^{\circ} 39' 20''$ north.

Perim is a low island, its harbour good, fronting the Abyssinian shore. It is barren, bare rock, producing, on some parts of it, plants of absynthium, or rue,⁸⁸ in others kelp, that did not seem to thrive; ... The island itself is about five miles in length, perhaps more, and about two miles in breadth. It becomes narrower at both ends. ... The sea afforded us plenty of fish, ... but all was rendered useless by our being deprived of fire. ... all we could get to make fire of, were the rotten dry roots of the rue that we pulled from the clefts of the rock, which with much ado, served to make fire for boiling our coffee. ... I therefore proposed, that ... myself and two men should cross over to the south side [of the Bab el Mandeb strait], to try if we could get any wood in the Kingdom of Adel.⁸⁹ This, however, did not please my companions. We were much nearer the Arabian shore, and the Rais had observed several peoples on land, who seemed to be fishers. If the Abyssinian shore was bad from its being a desert, the danger of the Arabian side was, that we should fall into the hands of thieves. ... [A description of the weather and difficulties with cooking food follows. The return to Luhayyah is decided]. ... But before we begin the account of our return, it will be necessary to say something about these famous Straits, the communication between the Red Sea and the Indian Ocean.

This entrance ... take[s] a shape between two capes; the one on the continent of Africa, the other on the

peninsula of Arabia. ... [A general description of the Gulf of Aden follows]. After getting within the Straits, the channel is divided into two, by the island of Perim, otherwise called Mehun.⁹⁰ The innermost and northern channel, or that towards the Arabian shore, is two league broad at most, and from twelve to seventeen fathom of water. The other entry is three leagues broad, with deep water, from twenty to thirty fathom. From this, the coast on both sides runs nearly in a north-west direction ... The coast upon the left hand is part of the kingdom of Adel, and, on the right, that of Arabia Felix. The passage on the Arabian shore, though the narrowest and the shallowest of the two, is that most frequently sailed through, and especially in the night; because, if you do not round the south point of the island, as near as possible, in attempting to enter the broad one, but are going large with the wind favourable, you fall in with a great number of low small islands, where there is danger.⁹¹ At ten o'clock, with the wind fair, our course almost north-east, we passed three rocky islands about a mile on our left.

On the 2nd [of August], at sun-rise, we saw land a-head, which we took to be the Main, but, upon nearer approach, and the day becoming clearer, we found two low islands to the leeward; ... We found there the stock of an old acacia-tree, ... We now made several large fires: one took the charge of the coffee; another boiled the rice; we killed four turtles, made ready a dolphin; got beer, wine and brandy, and drank the King's health in earnest ... I saw with my glass, first one man running along the coast westwards; ...; about a quarter of an hour after, another upon a camel, walking at the ordinary pace, who dismounted just opposite to us, and, as I thought, kneeled down to say his prayers upon the sand. ... I ordered two of the men to row me ashore, which they did. It is a bay of but ordinary breath, with straggling trees, and some flat ground along the coast. Immediately behind is a row of mountains of a brownish, or black colour. The man remained motionless, ... [here follows a long description of the conversation with the man, who was not trusted by

87. As shown by De La Rochette (1781) the island of Perim is horse-shoe-shaped, with the opening facing towards south-west; the highest point of the island is approximately 63 m above sea level. Bruce's description of the topography of Perim in the following agrees with the detailed map and view on the chart of De La Rochette, which also shows the anchoring in the bay. See also Table 2.

88. Bruce uses exactly the same names for plants he claimed to have observed at "Saiel" on the voyage south of Qusayr.

89. The Kingdom of Adal was a sultanate between the Abyssinian highlands and the southern part of the Red Sea and the Gulf of Aden. It is marked on the chart of De La Rochette (1781) as "Adejl". "Adel" was well known, and it is marked on Prinald's map of the world from 1766, which is reproduced as Fig. 5 in the Introduction to this volume.

90. These alternative names are also indicated on the chart of De La Rochette (1781).

91. All these points about the topography and the passage through the straits of Bab-el-Mandab agree with the chart of De La Rochette (1781), with exception of the "low small islands", which De La Rochette (1781) indicates as being high. The chart indicates numerous soundings.

Bruce]. About four we passed a rocky island, with breakers on its south end; we left it about a mile to the windward of us. The Rais [pilot] called it Crab Island.⁹² [On a shore of the African mainland near Crab island Bruce wanted specimens of the incense tree and asked a naked local man of “a very sly and thievish appearance”:] “... if you will bring me a branch of the myrrh tree, and of the incense tree to-morrow, I will give you two *fonduclis* for each of them.” He said that he would do it that night. “The sooner the better,” said I, “for it is now becoming dark.” Upon this, he sent away his boy, who, in less than a quarter of an hour, came back with a branch in his hand. ... to my great disappointment I found it was a branch of *Acacia*, or *Sunt* ... the myrrh (*mour*), he said it was far up the mountains ... [A dramatically told story follows about the dealing with people on the shore, which Bruce suggests were the same which some years earlier had murdered the crew of a ship belonging to the East India Company].

I directed the Rais to stand out towards Crab Island, and there being a gentle breeze from the shore, carrying an easy sail. While lying at Crab-island, I observed two stars to pass the meridian, and by them I concluded the latitude of that island to be $13^{\circ} 2' 45''$ north.⁹³ The wind continuing moderate, but more to the southward, at three o'clock in the morning of the 3rd, we passed *Jibbel Ourèe*, then *Jibbel Zekir*; and, having a steady gale, with fair and moderate weather, passing to the westward of the island *Rasab*, between that and some other island to the north-east, where the wind turned contrary, we arrived at *Loheia*, the 6th [August], in the morning, being the third day from the time we quitted *Azab*. We found everything well on our arrival at *Loheia* ... *Loheia* is in lat. $15^{\circ} 40' 52''$ north, and in long. $42^{\circ} 58' 15''$ east of the meridian of Greenwich.

A few more quotations from the text in Bruce's *Travels* refer to the coast of Africa near Assab:

92. “Crab Island” is shown on the chart of De La Rochette (1781) at approximately 13° N. Bruce indicated a latitude of $13^{\circ} 2' 45''$ N. The only island near the African shore north-west of *Perim*, apart from low-lying coral island in the Bay of Assab, is the small island *Sanahbor Desêt* near the shore north of Assab at $13^{\circ} 04' 44''$ N, $42^{\circ} 42' 55''$ E. The island consists of a rocky volcanic cone, reaching approximately 50 m above sea level. See also Table 2.

93. This, again, agrees better with the chart of La Rochette (1781) than with the actual topography.

...to *Azab*, or *Saba*, on the Abyssinian coast, whose latitude I found to be $13^{\circ} 5'$ north. It is not a port, but a very tolerable road, where you have very safe riding, under the shelter of a low desert island called Crab Island, with a few rocks at the end of it.⁹⁴ ... inland near to *Azab*, as I have before observed, are large ruins, some of them of small stones and lime adhering strongly together. There is especially an aqueduct, which brought formerly a large quantity of water from a fountain in the mountains, which must have greatly contributed to the beauty, health, and pleasure of *Saba*.⁹⁵ This is built with large massy blocks of marble, brought from the neighbouring mountains, placed upon one another without lime or cement, but joined with thick cramps, or bars of brass. There are likewise a number of wells, not six feet wide, composed of pieces of marble hewn to parts of a circle, and joined with the same bars of brass also. ... This seems to me extraordinary, if brass was at such a price in Arabia, that it could be here employed in the meanest and most common uses. However this be, ... all denominations agree, that this was the royal seat of the Queen of *Saba*, ... that these works belonged to her, and were erected at the place of her residence; ...⁹⁶

Evidence of the voyages from Qusayr and Luhayyah in Bruce's papers

Alexander Murray, in an overview of Bruce's life, written as an introduction to the second edition of the *Travels*, follows Bruce's text without explicitly expressing doubt about the disputed voyages south of Qusayr and Luhayyah, but also without providing

94. Bruce (1790), Vol. 1, p. 225. Previously, the Crab Island was described as a rocky island, agreeing with the actual topography of *Sanahbor Desêt*. See also Table 2.

95. Bruce's idea of an aqueduct near Assab does not agree with the topography. There are no large mountains near Assab with a sufficient rainfall to provide water for an aqueduct.

96. Bruce (1790), Vol. 1, pp. 444-445. There is no evidence on modern maps or in the archaeological literature of ruins from the Antiquity in this place. Metal clamps used to connect large dressed blocks of stone were used in Aksumite buildings (Phillipson 1998). Bruce might have seen such metal clamps within the area of the old Aksumite Empire, mainly at Axum itself, but such ruins are not known from the surroundings of Assab. See also Salt's discussion later.

positive evidence for them.⁹⁷ First the journey to the south from Qusayr: “During his residence at Cosseir, he [Bruce] made an excursion up the coast of the Red Sea, as far [south] as 23° 58’, and examined Jibbel Zumrûd, the emerald mine, described by Pliny and other ancient writers.” And the journey south from Luhayyah: “After leaving Jidda, Mr. Bruce sailed up the Arabian coast by Confoda, Cape Heli, and Loheia, till he reached the straits of the Indian Ocean.” A footnote by Murray at this text states: “See No. I of Appendix to Books VII and VIII ...”, but that entire Appendix contains nothing about voyages on the Red Sea, and there is no other Appendix with information relating to the footnote. In a copy of a letter from Bruce, apparently to Robert Wood and stated to have been written at Gondar in Abyssinia on the 1st of March, 1770, Bruce has described his voyages on the Red Sea, leaving out the voyages south of Qusayr and Luhayyah. This draft letter is reproduced in the second and third edition of the *Travels*:⁹⁸

Cosseir is a miserable village close to the sea. There is no port; small vessels which are only employed in running across to the Arabian shore and back again, anchor behind a rock, which shelters them from the wind. Mr. Huet⁹⁹ takes this to be Berenice, but that city

97. Murray’s “Account of the Life and Writings of Mr. Bruce” in Bruce (1804), vol. 1, pp. i-clxxxvi.

98. Murray’s “Appendix XXVII” and “Appendix XLI” in Bruce (1804), vol. 1, and “Appendix to Book First” in vol. 2 do not support that Bruce or Balugani made sea voyages along the Egyptian coast south of Qusayr or south of the crossing from Loheia to Massawa. The letter presumably to Mr. Wood is reproduced in Vol. 1, pp. cclxxii-cclxxx; see later about the evidence from this letter with regard to Bruce’s and Niebuhr’s latitudes for localities at the Red Sea.

99. “Mr. Huet” is presumably Pierre Daniel Huet (1630-1721), author of a treaty of the history of trade and navigation in Antiquity: *Histoire du commerce et de la navigation des anciens* (1716; not consulted). “Berenice”, or Berenike, was an important seaport in the Antiquity, located just south of Ras Bânâs, Bruce’s “Cape Nose”. Wellsted (1838), pp. 332-348, gave illustrations and a detailed description of the Ptolemaic ruins at Berenice, which were clearly visible at the time of his visit. Bruce appears to be ignorant about the presence of the ruins of Berenice and Shenshef in the sheltered bay behind his

was under the tropic, and the latitude of Cosseir is 26° 7’ 51”, and its longitude 34° 16’ 15” E. from London. [Then follows a discussion of which other Antique town might possibly be identical with Cosseir.] ...

We embarked at Cosseir the 11th of April, in a vessel, the planks of which were sewn together with small cords, which, in my opinion, far from implying danger, makes them the safer embarkation in this sea of shoals and banks, where navigation is understood. The wind, favourable at first, changed and blew hard, and carried us before it down again east of Arabia Petraea, the morning being hazy till near noon, when it cleared, and we saw, on the Arabian shore, a cape which we after found to be Ras Mahomet [Ra’s Muhammad, the southernmost point of the Sinai Peninsula], one of those which form the entrance of the Elanitic gulf, whose latitude I then observed 27° 54’ [N],¹⁰⁰ so that we had got down near Mt. Sinai. A few days after, with a more favourable wind, coasting Arabia Deserta, and anchoring every evening, we arrived at Yimbo ... [It] has been an excellent port, though now, in great part, filled up with sand. ... Yimbo is in latitude 24° 3’ 35”,¹⁰¹ and 37° 57’ 35” E. longitude from London; it is, after Jidda, the port most frequented in Arabia Deserta... Yimbo is the port of Medina. I should have been glad to have made the rest of my journey to Jidda by land, but no Christian can be admitted to travel in Arabia Deserta, this ground having been sanctified by the many expeditions and journeys of the prophet. We were therefore content to continue our voyage by sea, and ... to make small incursions into the forbidden country ... We anchored the first night in a small port (Djar) in latitude 23° 36’.¹⁰² ... The next day we anchored off Rabac ... in 22° 45’ latitude.¹⁰³ From Rabac, passing by places of lesser note, we came to Jidda on the 6th of May. There were seven English ships at Jidda from India ... Its latitude is 21° 28’ 1” [N]¹⁰⁴ and longitude 39° 21’ 30” east from London; it is the seaport of Mecca.

“Cape Nose.” Modern archaeological studies have indeed demonstrated that Roman trade with ports in the Indian Ocean went through Berenike from approximately 30 BC to AD 638 (Cappers 2006).

100. Niebuhr’s latitude of Ras Muhammad: 27° 54’ N

101. Niebuhr’s latitude of Yimbo: 24° 05’ N

102. Niebuhr’s latitude of Djar: 23° 36’ N

103. Niebuhr’s latitude of Rabac: 22° 45’ N

104. Niebuhr’s latitude for Jiddah: 21° 27’ N, but observed half a mile out of town.

We left Jidda the beginning of July, and continued along the coast of Arabia Deserta to Ras Hali, a cape which divides the states of the Sheriffe of Mecca from those of Yemen or Arabia Felix. It is in the latitude 18° 36' [N]¹⁰⁵; all to the southward belonging to another sheriffe called the Imam, who resides inland at Sanaa, in latitude 15° 21' [N].¹⁰⁶ All the sea-coast there is desert, as that of Arabia Deserta, but full of good ports and anchoring places. The beginning of August we arrived at Loheia; it is a town of some trade, built on the point of a tongue of land, at the entrance of a great bay now half filled up with mud, and where there is no water for any vessel of burden; it is in the latitude 15° 40' 32" [N]¹⁰⁷ and 42° 54' east longitude. Here we waited to the beginning of September, when we embarked on board a small bark for Massowa. In this second voyage across the Red Sea, we passed Jibel Teir, formerly a volcano ... It flames no more, but sends forth a smoke in winter. In the end of September, we arrived at Massowa. ... It is in latitude 15° 35' 5" and 38° 48' 45" E. Longitude from London. ...

There is no mentioning of the two questionable voyages in this drafted letter, but Murray, loyal to the text of the *Travels*, has added a footnote at the asterisk: "Mr. Bruce does not mention here his southern excursion [to the Straits of the Indian Ocean]."

Murray also cites a slightly reworded "Abstracts of the principal Dates, &c. in the narrative of Mr. Bruce's Journeys, written by himself, from Thursday, December 13, 1768, till his Arrival at Masuah [Massawa]; taken from his Pocket or Common-place Books, No. 1, 2, and 3."¹⁰⁸ The text does not mention the voyages to the south from Qusayr and Luhayyah:

22nd [March] ... At 11 ¼ o'clock, Cosseir. Here very long description of Cosseir. ... Great storms in the Red Sea while they were at Cosseir. One of these began on the 31st March, at one in the morning. [Astronomical observations were made at Cosseir on March 26 and 5 April; no other recorded before Imbo and Jidda.] Sailed

105. Niebuhr's latitude for Ras Hali: 18° 36' N

106. Niebuhr's latitude for Sanaa: 15° 21' N. Bruce never claimed that he went to Sanaa.

107. Niebuhr's latitude for Luhayyah: 15° 42' N.

108. At the end of Book I of Murray's edition of the *Travels*.

from Cosseir, April 11th (is written March, which is evidently an error.) Morning of the 14th in Gulf Hamra, anchored at Gidee or Giden. A violent storm ... On the morning of the 17th April, passed Jibbel Hassan. Arrival at Imbo. Description of Yimbo ... [Murray states:] I cannot state precisely the stations on the different days, from April 11th, when they sailed from Cosseir, till they arrived at Imbo. The weather was stormy. The ship was bound for the Arabian shore, but was driven considerably to the north, though I do not observe that she touched Cape Mahomet. Nor have I found the observation ... [the observation mentioned in the letter to Robert Wood: "the entrance of the Elanitic gulf ... 27° 54'."] They reached Dar el Hamra on the 14th, and anchored at Gidee; this place is near Jibbel Shekh, on the Arabian coast. They anchored every night. Jibbel Hasan is the isle called Hassa, or Hassane, on the maps. Probably the 17th ought to be corrected 15th. They anchored at Har, in the map incorrectly spelt Mhar, on the night of the 15th. On the 16th, they anchored before Imbo. April 28, 1769, at seven o'clock in the morning they embarked at Imbo, in a little ship, commanded by a Sheikh Sherie. This is the first entry in Balugani's *Viaggio di Imbo a Gedda*. Mr Bruce arrived at Loheia on the 18th of July, where he remained till his departure for Abyssinia. He made observations of latitude or longitude there, July 21st, 26th, August 5th, 18th, 21th, 26th, 27th ... Balugani's journal of this period is complete. He [Bruce, but obviously also Balugani] left on the 1st of September 1769. ... [The extract from Balugani's *Giornale del Viaggio fatto di Loheia à Massoua* is omitted here; there is no mentioning of Bruce's voyage to Bab-el-Mandab. The arrival at Massawa is simply recorded as this:] Martedi, 19 d. 5 ore W.b.N. Massoua. Altura 15° 35' 5". Long^e 36° 23' 45".

Murray concluded about the veracity of Bruce's *Travels* in general:¹⁰⁹

Though his journals were in general copious, he too often omitted to consult them, trusting to the extent and accuracy of his recollection. At the distance of fifteen years, a part of so many incidents must have been effaced from the most tenacious memory. Before he composed his narrative, his mind had begun to suffer from the indolence natural to his time of life. He was not sensible, that, by relying with too great security

109. Bruce (1804), Vol. I, p. clxxvi.

on his memory, he was in danger of confounding dates, actions, and circumstances, which might have been easily rectified by his papers. To this inattention must be imputed those particular inconsistencies, which have been unjustly ascribed to his vanity or want of veracity.

George Annesley's comments on Bruce's voyage south of Qusayr and between Luhayyah and Bab-el-Mandab

Niebuhr was not the strongest critic of Bruce's *Travels* with regard to the account of Egypt and the Red Sea. In George Annesley's work on his travels in India, on the Red Sea, in Egypt, etc., in 1802-1806, there is harsh criticism of Bruce's accounts of the Red Sea:¹¹⁰

Although I was not so fortunate as to reach Macowar, yet I was sufficiently near to it to convince myself, that ... Mr. Bruce's adventures at, and near it, were complete romances. ... [Bruce-has,] however, convicted himself, by pretending to give us latitudes. He declares that, by his own observations, Jibbel Zumrud is in lat. 25° 3' N. when, in fact, it is a place as well known as any part of the Red Sea, and is in 23° 48' [N].¹¹¹ It might be supposed that this is an error of the press, were it not that he has placed the island in the same latitude in his extraordinary chart, of which I shall have to speak hereafter; ... Mr. Bruce departed from Jibbel Zumrud on the 16th at three in the afternoon, and on the 17th at twelve he was, as he says, four miles north of an island called Macowar, which he found to be in lat. 24° 2' N. The asserted position of this island cannot be owing to any error of the press, [because of] his stating that it lies off the celebrated Ras-el-Anf, or Cape of the Nose, where, he rightly observes, that "the land, after running

in a direction nearly N.W. and S.E. turns round in the shape of a large promontory, and changes its direction to N.E. and S.W."¹¹² It is evident that there is an island in the position he has given to Macowar, which is by mistake called Emerald Island in Sir Home Popham's chart,¹¹³ but is in fact the Kornaka of Don Juan de Castro, while the real Jibbel Zumrud is placed in its proper position, but is called St. John's island. ... I think it clear from the above observations, that Mr. Bruce has represented himself, in the first place, as visiting an island called Jibbel Zumrud, in lat. 25° 3' N. though in fact, that island lies in 23° 48', and afterwards as reaching another island, Macowar, in 24° 2' N', which, in fact, lies in 20° 38'.¹¹⁴ ... I think it impossible to account for these errors in any other way than by considering the whole voyage as an episodic fiction compiled from the accounts of other navigators, ... [This view] has been confirmed, since my return, by the observation first made by an ingenious but anonymous writer in the *Monthly Magazine*,¹¹⁵ that of twenty charts or drawings taken by Mr. Bruce's assistant, Luigi Balugani, in the Red Sea, not one relates to the pretended voyage from Cosseir to Jibbel Zumrud. ...

[The following quotations are from the third volume of Annesley's work.] To any person accustomed to nautical observations, it must appear most singular, that seven ... [of Bruce's] latitudes should agree precisely with those given by Mr. Niebuhr, though the one was travelling by land, and the other by sea.¹¹⁵ ... It

110. The following long quotation is from Annesley (1809), Vol. 2, pp. 327-331.

111. This is the latitude of St. John's Island, sometimes given the names which Bruce attributed to the more northern island at approximately 24° 45' N. Wellsted (1835) who pointed out, as also shown in this paper, that there is an island called Wady Jemäl [Wadi Gemal Island] in the position of the island which Bruce calls "Emerald Island" or "Jibbel Zumrud". The island at 23° 48' [N] on Bruce's map (Fig. 2) is called "Bruce's Island".

112. See previously, where de Castro's, De La Rochette's and Bruce's descriptions of these islands and their positions are discussed. Homes Popham's chart was published 21 years after the first edition of Bruce's *Travels* (Popham 1801-1802) and improved the charts of the eastern shore.

113. This is discussed by Wellsted (1835) who suggests that the Macowar island of George Annesley is a different and more southern island (Mukawwar at 20° 48' N) than the one mentioned by Bruce. But, as shown previously and in Table 1 no actual island agrees with Bruce's Macowar.

114. According to Annesley "Monthly Magazine (December, 1807), p. 549." The page reference is incorrect, see Anonymous (1807-1808) in the list of references for full bibliographic detail.

115. The seven latitudes suspected by George Annesley are those of Ras Mahommed (27° 54' N), Djar (23° 36' N), Rabac (22° 45' N), Konfodah (19° 07' N), Ras Heli (18° 36' N), Kotumbal (17° 57' N) and Djezan (16° 45' N). Wellsted (1835) has correctly pointed out that for most of their voyages on and

is equally extraordinary that Mr. Bruce, in a coasting voyage should invariably find it convenient to ascertain the latitude of those places only in Arabia, which Mr. Niebuhr had before given to the public, ... Could any doubt remain after this, that Mr. Bruce had copied the latitudes in Arabia from Mr. Niebuhr, it would be removed by the publication of the original observations of the former gentleman, in the second edition of his travels, in which the situation of not one of these places appears to have been even attempted to be ascertained, except Yambo, Jidda, and Loheia. Of the remaining observations, those respecting Jibbel Zumrud, Macowar, and Camaran, are completely false; of the islands eastward of Dhalac we have no opportunity of judging; and of those below Loheia it appears probable he was not the author; nor indeed is it probable that he actually made the voyage he has described to the Straits of Bab-el-Mandeb. This has been placed in so strong a light, by the anonymous author whom I have before mentioned, that I shall give his observations nearly in his own words. On the 27th of July, 1769, Mr. Bruce, according to his travels, sailed from Loheia in the Red Sea, upon a voyage of observation to the Straits of Bab-el-Mandeb, from which he returned to Loheia on the 6th of August. On the 5th of August, however, the very day preceeding his return, two observations taken at Loheia appear in his journals, ... Mr. Bruce, in a letter given in the appendix to the second edition of his travels,¹¹⁶ says, "We left Jidda the beginning of July. The beginning of August we arrived at Loheia. Here we waited till the end of September, when we embarked on board a small boat from Massoua ... [on] this second voyage across the Red Sea," ... yet this would have been the third, had he really performed an intermediate voyage to the Straits of Bab-el-Mandeb. ... The chart of the Red Sea by Monsieur De La Rochette, was republished by Mr. Faden in 1781, with many additions by Colonel Capper.¹¹⁷ This ... had many errors, by all of

at the Red Sea Niebuhr and Bruce went by sea.

116. Neither the anonymous author nor Annesley notice that the latitudes identical with Niebuhr's are indicated for a number of these localities in Bruce's draft letter, presumably to Mr. Wood and dated at Gondar, Abyssinia, on the 1st of March, 1770, two years before the publication of Niebuhr's map of the Red Sea.

117. The present author has seen the chart (De La Rochette 1781) in two slightly differently prints. One, in four sheets, in the Library of the Royal Geographical Society, London; in

which Mr. Bruce was misled in his fictitious voyage. He reaches the island of Rasab at five in the morning, passes Camaran at six, at twelve passes a low round island, and at one is off Cape Israel, This, according to Faden's chart, is perfectly correct, but unfortunately Camaran is nearer to Loheia than Rasab: and instead of its being a six hour's voyage from Camaran to Cape Israel, they are not above three miles asunder.¹¹⁸ They anchor on a shoal, which lies [near] the north fort of Mocha, where no shoal actually is; his description of Perim, as five miles long and two miles broad, when in fact it is only three miles long and not one broad; his assertion, that the narrow Straits of Bab-el-Mandeb are two leagues wide, when in fact they are not one; his calling the islands in the great Straits low, when in fact they are lofty rocks; and his account of the chain of hills along the African shore, where the hills are singler, and at a great distance from each other, are errors which a person who had visited the spot, could never have fallen into. Crab Island had been named and placed in the chart of 1781 by De La Rochette; from its position, it is probably designed for one of the small islands near Ras Firmah¹¹⁹; but it is given of a much greater size than it really is.¹²⁰

Henry Salt did not comment on Bruce's voyages on the Red Sea in the three volumes published by George Annesley, but Salt added a note on Bruce's pretended visit to Assab in the account of his second visit to Abyssinia in 1809-1811.¹²¹ These comments agree with the previous objections to Bruce's disputed statements about ruins at Assab:

this the name "Colonel James Capper" is specifically mentioned in the cartouche, as stated by George Annesley. Another copy, in two sheets, in the National Library of Firenze, where the name "Colonel James Capper" does not appear in the cartouche. The parts of the two versions of the chart relating to Bruce's pretended voyages do no differ with regard to the information discussed here.

118. As stated before, it has not been possible to verify the position of the island of Rasab.

119. "Ras Firmah" seems to be a misprint for or variant spelling of Ras Terma, indicated on the chart of De la Rochette (1781) and modern maps, where it is located at 13° 13' 30" N, 42° 33' E.

120. Annesley (1809), Vol. 3, pp. 282-285.

121. Salt (1814), p. 104, in the account of Salt's second visit to the Red Sea and Abyssinia in 1809-1811.

One circumstance, however, ought not to be passed over in silence. In this same treatise, Mr. Bruce gives a very detailed account of some magnificent ruins at Asab; “the blocks of marble” ... which “were joined with thick cramps or bars of brass” and he adds soon afterwards, “but upon analysing this on my return to England, I found it copper without mixture, or virgin copper.” Now the whole of this proves to be pure fiction, for, the late editor of his works has confessed, that the whole voyage from Loheia to Babelmandeb and Asab, which was first suspected by Mr. Laing, the wellknown author of “The History of Scotland,”¹²² must be given up as being totally inconsistent with the observation and dates found among Mr. Bruce’s own journals.

James Augustus St. John’s comments on Bruce and Niebuhr

The journalist and radical publicist James Augustus St. John, who had himself travelled in Egypt and Nubia, published comments on Niebuhr and Bruce in his popular biographies of travellers. St. John’s description of the voyage south of Qusayr paid particular attention to the precious stones which Bruce mentioned on that voyage:¹²³ “While waiting for a ship bound for Tor, he [Bruce] undertook a short voyage to the Mountains of Emeralds, or Jibbel Zumrud, where he found the ancient pits, and many fragments of a green crystalline mineral substance, veiny, clouded, but not so hard as rock crystal. This he supposed was the *smaragdus* of the Romans, and the *siberget* and *bilur* of the Ethiopians, but by no means identical with the genuine emerald, which is equal in hardness to the ruby.” The contended voyage from Luhayyah to Babel-Mandab is also briefly hinted at: “The time ... Bruce employed in completing his survey of the Red Sea.” St. John presented his critical view of Niebuhr at the end of his popular account of Niebuhr’s voyage:¹²⁴

122. Malcolm Laing (1762-1818). It has not been possible to trace the source of this statement.

123. St. John (1832), Vol. 2, the entire biography on pp. 233-301, the voyages on pp. 271 and 273-274.

124. St. John (1832), Vol. 3, the biography on pp. 118-169, the strong criticism of Niebuhr on pp. 150-152.

I am sorry to discover that, among other prejudices, he [Niebuhr] was led, partly, perhaps, from vanity, to accuse Bruce of having copied his astronomical observations; of having fabricated his conversation with Ali Bey; as well as ... “the pretended journey over the Red Sea, in the country of Bab el Mandeb, as well as that on the coast south from Cosseir.” [Quoted from B.G. Niebuhr’s biography of his father.] ... The same writer informs us that “Niebuhr read Bruce’s work without prejudice, and the conclusion he arrived at was the same which is, since the second Edinburgh edition, and the publication of Salt’s two journeys, the universal and ultimate one.” During the composition of these Lives [St. John’s *Lives of Celebrated Travellers*], I have almost constantly avoided every temptation to engage in controversy with any man; I hope, likewise, that I have escaped from another, and still stronger temptation, to exalt my own countrymen at the expense of foreigners; but I cannot regard it as my duty, on the present occasion, to permit to pass unnoticed what appears to me a mere ebullition of envy in Niebuhr, and of weakness and want of reflection in his biographer. ... But my unwillingness to speak harshly of Niebuhr, whose name ranks with me among those of the most honest and useful of travellers, forbids me to carry this discussion any further. ...

These statements were contradicted by a “Professor Robinson,” editor and translator into English of B.G. Niebuhr’s biography of his father:¹²⁵

In a recent work entitled *Lives of celebrated Travellers*, which contains also a biography of Niebuhr, I have regretted to observe some very superficial and flippant remarks on the above statement respecting Bruce.¹²⁶ Every one at all acquainted with the subject, knows that this judgment of Niebuhr is in general the correct one; that Mr. Bruce, although he usually places facts as the basis of his narrative, is yet very careless and often wide of the truth in regard to the colouring and details; and sometimes has even not hesitated to make a wilful sacrifice of the truth. ... [T]he general negligence and high colouring of his manner is well accounted for by Mr. Murray, ... when he remarks, that “... In the latter part of his days, he

125. The translator, “Professor Robinson”, in Niebuhr (1836), footnote on p. 54.

126. B.G. Niebuhr’s summary of Carsten Niebuhr’s view on the veracity of Bruce, cited previously in this paper.

seems to have viewed the numerous adventures of his active life as in a dream, not in their natural state as to time and place, but under the pleasing and arbitrary change of memory melting into imagination.¹²⁷ ... The remarks of the author of the superficial *Lives* above mentioned, are indeed directed more against Lord Valentia and Mr. Salt, than against Niebuhr. ... [H]is standard of value is entertainment, rather than truth and accuracy; and hence, in his view, Bruce bears away the palm from most, if not all other travelers.

Wellsted's "Notes on Bruce's Chart of the Coasts of the Red Sea"

As mentioned above, Wellsted published comments on Bruce's Chart of the Coasts of the Red Sea.¹²⁸ These comments followed his own experience from surveys in 1830 of the coasts and islands of the Red Sea by the two vessels from the British East India Company, the *Benares*, under command by Captain Elvon, and the *Palinurus*, under command of in Captain Moresby, the former along the eastern shores and the latter as far as the Gulf of 'Aqaba. Without mentioning the names of George Annesley or Henry Salt, Wellsted stated that Bruce's voyage to the south of Qusayr had been considered untruthful for three reasons: (1) the wrong position the island of Makowar at 24° 2' N instead of its true position at 20° 38' N; (2) The short time accorded to a voyage from Qusayr to Makowar, a distance of nearly four hundred miles which could not be covered in four days; (3) that Bruce was wrong in stating the point where the Arab vessels cross from the African side to the Arab side at Makowar. Wellsted defended Bruce by pointing out that reason for this would be two islands with almost identical names, Makowar and Macowa, at 20° 38' N and 24° 2' N respectively. The southernmost island is the larger and best known, whereas the northern is a small island at Ras Bánàs (Ras el Anf or Cape Nose, as it is called by Bruce). Wellsted points out that both localities were used as points of departure for crossing

the Red Sea by Arab vessels, and the name Mukawwir can mean "point of departure" and is thus likely to be used for several independent places:

... the recent survey, conducted by Captains Elvon and Moresby, ... embraced the western coast of the Red Sea, not visited by Niebuhr, but where the geographical positions assigned by Bruce to the places at which he touched, coincide as strikingly and closely with those assigned by our survey, as did the corresponding observations of the two travellers on the opposite coast, I must premise that undue weight has been attached to the assertion, that the observations from which Bruce obtained his latitudes were made at sea, whereas those of Niebuhr were taken on land. ... The fact however is, that from Tor to Loheia both travellers performed the journey in boats, precisely in the same manner; ...¹²⁹

In the table given by Lord Valentia ..., where the results of Niebuhr's and Bruce's observations are compared, we find, that of eleven positions which are contrasted, seven agree within the mile. The latitude assigned to Ras Mohammed by Bruce differs in reality, as I have already observed, nine miles from the position given to it by Niebuhr;¹³⁰ and as the data from which the latitudes of Yembo, Jiddah, and Loheia were determined, were calculated by the Astronomer Royal, no suspicion can be attached to these. This would reduce the number of Bruce's positions - against which, on account of their approximating so closely with those of Niebuhr, any charge of plagiarism can be brought - to three; ...¹³¹

To [the] confusion of names, which every person who has visited this region must have remarked, we ought to attribute the misunderstanding which exists on the subject of Mr. Bruce's visit to the island which he called Jebel Zumrud, or Emerald Island, and which his critics have assumed to be Jebel Zeberjed, or St. John's. ... I cannot, however, find that sufficient reasons have been advanced in support of this conjecture, unless indeed advantage be taken of the confusion of names, against which Bruce himself repeatedly warns his readers to be on their guard. ... There is little doubt that Bruce must have alluded to the island of Wady

127. Murray's Preface to the Third Edition of *Travels*; Bruce (1813), Vol. 1, p. xii.

128. Wellsted (1835).

129. Wellsted (1835), pp. 286-287.

130. But the present author finds it strange that the latitude assigned to Ras Mohammed by Bruce in his letter to Mr. Wood from Gondar, dated 1770, is identical with that of Niebuhr published in 1772, both 27° 54' N.

131. Wellsted (1835), p. 290.

Jemal, the true latitude of which corresponds pretty nearly with that assigned by him to his Emerald Island ... probably thus named it in consequence of its vicinity to the emerald mines or mountains situated on the adjacent continent. ... [T]he correctness of his description of that part of the shore on which he landed, and which, as he remarked, is still called Sael (Sâhel), is fully confirmed by Mr. Belzoni, who visited the same place in 1816.

The appearance which this island¹³² presented when first seen by Bruce, “rising like a pillar out of the sea,” does not certainly apply to Wady Jemal; but illusions of a similar nature, depending on atmospheric refraction, were so familiar to us during our survey of this region, that we never hesitated to attribute the above inconsistency to this cause. ...¹³³

Wellsted also comments positively on Bruce’s account of the voyage to Bab-el-Mandab, which had been accused of having been plagiarized from the travel account by Irwin who visited the strait of Bab-el-Mandab in 1777 on board the East India Company vessel on his way to England via Egypt, but did not describe the topography of Bab-el-Mandab in any detail.¹³⁴ Wellsted discussed these points, and pointed out that Bruce had details in his description from the voyage that could hardly have been extracted from Irwin’s account or from other ship’s journals or log-books, and he concluded that Bruce in all probability really made the voyage:¹³⁵

The principal objections which have been urged against the reality of this journey are: 1st. The silence of Signior Balugani, who was employed by Mr. Bruce to keep the Journals; 2^d. The Observation appearing in the original

Journal the day after he, Mr. Bruce, sailed from Lohe’ia; 3^d. His calling the islands off the large straits low, when in fact they are lofty rocks; and 4th. His stating the width of the small straits at two leagues, when in fact they are scarcely one.¹³⁶ Mr. Bruce’s remark, that the narrow strait is two leagues broad, is incorrect; although, in stating the whole distance from one continent to the other, he is perfectly right, as well as in all those remarks which refer to the currents, situation, and appearance of the land—with the exception of the word “low,” which he may however have used as contrasting it with the very high land on either shore. ... The accuracy of his description of Perim – his Observation that its harbour faces the Nubian coast, its barrenness, its becoming narrower at either end – the existence of Absynthium, &c.— are all substantiated by the several visits of the surveying-vessels; ...¹³⁷

In the same paper Wellsted provided a long list of Bruce’s latitudes for localities at the Red Sea and compared them with the results of the survey in which he had taken part. Wellsted’s conclusion was generally positive for the veracity of Bruce, but largely leaves out the possibility that at least some of the observations might have been taken from Niebuhr. However, a note by the editor of the *Journal of the Royal Geographical Society* at the end of Wellsted’s paper somewhat contradicts the defence of Bruce:

...it cannot be denied that his total silence respecting this adventurous journey in his letter to Mr. Wood, wherein he states merely that he left Jiddah in the beginning of July, and arrived at Lohayyah in the beginning of August ..., as well as the long dialogues and romantic air of his narrative, give some colour to the suspicion thrown on this part of his *Travels*.¹³⁸

132. Emerald Island, Wellsted’s “Wady Jemâl”. The description does, however, fit exactly the profile of St. John’s Island on the chart of De La Rochette (1781).

133. Wellsted (1835), pp. 291-292.

134. Irwin (1780), pp. 1-119. Irwin’s voyage on the Red Sea followed an easterly route from Bab-el-Mandab to Mocha, Yambo and Jiddah, and via Ras Mohammed to Qusayr. Irwin’s travel account has in the relevant part little similarity with the accounts of Bruce.

135. Wellsted does not discuss the possibility that nearly all the information could have been taken from the chart of De La Rochette (1781).

Wellsted repeated some of the text from the *Journal of the Royal Geographical Society* in the two volumes in which he described observations from his travels in Arabia and voyage on the Red Sea. Bruce is mentioned several times in both volumes, but only Wellsted’s first hand observations at Cape Nose (called “Ras Bonas”)

136. Wellsted (1835), p. 294.

137. Wellsted (1835), p. 295.

138. Wellsted (1835), p. 295.

and on the islands around that promontory is compared at length with Bruce's text, with the same conclusion as in the previous publication.¹³⁹

Lifted latitudes...?

Indications of latitudes are scattered throughout Bruce's *Travels*, while indications of both longitude and latitude are scarce. Observations of latitudes were relatively simple to make, even at sea, while observations of longitudes were complicated and time-consuming and best made on land.¹⁴⁰ For determination of longitudes Niebuhr used observations of the moon together with the lunar tables devised by the astronomer Tobias Mayer, Niebuhr's teacher at the University of Göttingen, while Bruce used observation of the moons of Jupiter, according to a method devised by Galileo Galilei. Bruce's comment on Niebuhr's latitude for Alexandria has been mentioned above; there is 30" difference between them. Their observations of the latitude for Cairo are also different. Bruce gives the latitude 30° 2' 30" N for Cairo's Babylon-quarter, while Niebuhr gives the latitude as 30° 2' 58" N for the street in Cairo where the French live. Murray hints that many more observations are indicated in the *Travels* than could be found among Bruce's paper:¹⁴¹

These ... are all the observations of longitude and latitude found in Mr. Bruce's journals. Yet a considerable number ... appear to have been made by him, which the editor could not discover among his papers ...

He attributes this to the original observations having been lost, rather than that the figures were copied from another publication. A comparison is given in

139. Wellsted (1838). The reprinting of part of the paper from the *Journal of the Royal Geographical Society* is found on pp. 311-329.

140. See the detailed discussion of Niebuhr's methods in nautical astronomy in Baack (2013).

141. Bruce (1804), vol. 7, Appendix, "Observations of Latitude and Longitude ..." and "Observations of the Satellites of Jupiter." Only seen in the third edition, where these chapters are on pp. 371-396. The Murray-quotation is on p. 393.

the table between the latitudes of places along the Red Sea observed by Niebuhr and recorded by Bruce. By immediate inspection it seems convincing that Bruce must have used a number of Niebuhr's observations for the latitudes that are identically indicated by the two travellers. But if we assume that the document published by Murray as a letter written on the 1st of March, 1770, in Gondar, Abyssinia, by Bruce and addressed to Mr. Wood is correctly represented in the printed form,¹⁴² then latitudes identical to the minutes with Niebuhr's observations had been observed by Bruce for Ras Mohammed (27° 54' N), Djar (23° 36' N), Rabac (22° 45' N) and Ras Hali (18° 6' N). This similarity is peculiar at a time when Niebuhr was in Copenhagen and had not yet published anything about his observations, and Bruce was in Gondar and had been in Abyssinia since September, 1769. Only two explanations seem likely: (1) That latitudes identical with Niebuhr's were added to the draft letter since the publication of Niebuhr's chart in 1772,¹⁴³ or (2) that Niebuhr's observations were available to Bruce before he went to Gondar in 1769. The second explanation requires that Niebuhr's information was available in unpublished form at least to some people interested in navigation on the Red Sea. This may well have been the case. B.G. Niebuhr describes how his father in 1764, in Bombay, gave a copy of the finished chart of Red Sea to a certain Captain Howe:¹⁴⁴

Among his nearest friends [in Bombay] was Captain Howe of the Royal Navy, a brother of Admiral Lord Howe and of General Sir William Howe. From him my father received engraved charts of the Indian seas, and

142. Bruce (1804), Vol. 1, pp. cclxxii-cclxxx. Murray states in a footnote about this letter: "The copy of this letter, presented among Mr Bruce's papers, is incomplete; and ... not addressed to any person, ... From the expressions, however, at the beginning, and other circumstances, there can be little doubt that he designed it for Mr Wood. It is written on a very large sheet of what is called Dutch paper, some of which he got at Jidda, on his way to Habbesh. It contains the earliest account of his journey into that country."

143. The editor, A. Murray, does not mention anything about possible later changes of the document.

144. Niebuhr (1815), pp. 29-30.

of single portions, roads and harbours, of the south-eastern coast of Arabia. It was a source of pleasure to Niebuhr, to be able to requite the present of his friend by another, in which he could truly manifest to the English nation his gratitude for their hospitality. He gave him therefore a copy of his chart of the Red Sea, which he had completed at Bombay, and which from Djidda northwards was wholly new to the English; for no British ship had then ever visited these waters. With the help of this chart they undertook the navigation some years afterwards.

In Niebuhr's description of his stay in Bombay there is further evidence that his chart of the Red Sea was shared with British merchants and that it is therefore not unlikely that Bruce could have received a copy with Niebuhr's latitudes through this avenue.¹⁴⁵

Finally a Mr. Holford, an experienced sailor who had often had difficulties with custom officers at Djedda ... received a copy of my chart of the Arabian Gulf (*Beschreibung von Arabien* Tab. XX) which I had initially designed at a greater scale and had communicated to a friend in Bombay.

Conclusion

With some minor exceptions Niebuhr's corrections to Bruce's *Travels* are justified. He is certainly right in stating that the long conversations in the *Travels* must have been reconstructed from memory, if not completely invented. Since Murray's editions of the *Travels* this has been admitted by most scholars. It remains to find the explanation for the strange fact that latitudes identical with latitudes observed by Niebuhr appear in a copy of a letter supposedly written by Bruce at Gondar in 1770, before the publication of any of Niebuhr's data. Wellsted is certainly too kind to the memory of Bruce when he implies that such similarities indicate the reliability of Bruce as an observer.

Already Wellsted admitted that Bruce's description of the voyage south of Qusayr was confused, especially with regard to the place-names. The geogra-

phy of that area had been described by a number of previous authors, the first ones in the Antiquity. The striking similarity between the topography shown on the chart of De La Rochette of 1781 and Bruce's description of it in 1790, the confusion and the sometimes equally striking difference between De La Rochette and Bruce on one hand and the real topography on the other make it almost impossible to believe that Bruce has based his descriptions on actual voyages.

Ullendorff has suggested:¹⁴⁶ "The narrative of the *Travels* is free from all intentional inaccuracies, but the style has at times a flamboyant quality which was apt to give rise to misunderstanding. There are no grounds whatever on which to challenge its essential veracity." This may be true with regard to much of the travels in Abyssinia, but there are good grounds to challenge the veracity of Bruce's Red Sea voyages south of Qusayr and Luhayyah. Even with regard to events in Abyssinia some of Bruce's statements have been found to be untrue. An example is Bruce's misrepresentation of the date of Luigi Balugani's death at Gondar. This, according to Bruce, happened before the travels to the source of the Blue Nile, which took place in October-November 1770, but from preserved notes in Balugani's hand on dated meteorological observations we know that he was alive at least until 14th of February 1771.¹⁴⁷ Bruce's statements about his authorship of the drawings made during the *Travels* have also been shown to be misrepresentations.¹⁴⁸ A recently discovered example of untrue information in *Travels* is the account of how Bruce found the shrub "farek" (*Bauhinia farek* Desv.; Leguminosae. subfam. Caesalpinioideae).¹⁴⁹ Bruce claimed that this plant was found at the source of the Blue Nile; the published illustration, however, represents *Bauhinia divaricata* L., a tropical American plant grown in the Royal Botanic Garden at Versailles, which Bruce visited on his journey

146. Ullendorff (1953), p. 142.

147. Hulton, Hepper & Friis (1991), pp. 119-120.

148. Hulton, Hepper & Friis (1991), pp. 55-60.

149. Bruce (1790), Vol. 5, pp. 57-64, "Farek, or Bauhinia acuminata."

145. Niebuhr (1778), pp. 11-12.

home through France. The plant has never been documented to grow in Ethiopia.¹⁵⁰

The present review of the interaction between Niebuhr and Bruce demonstrates two very different personalities, but also two different approaches to exploration: Bruce was the old-fashioned, rather casual “gentleman traveller,” who did not care much for detail or documentation and preferred a colourful narrative that would be approved by the general public to dry factual observations, while Niebuhr represented the new scientific travelling observer, who carefully documented everything. Niebuhr’s maps and chart are very accurate for their time;¹⁵¹ they represent a new era in map-making, while Bruce’s maps and charts follow the old tradition according to which features and names were liberally copied from all available sources, frequently without attribution, and blank areas filled in according to hearsay or even imagination. Hopefully, further studies may finally allow the writing of a scholarly biography of Bruce, where his obvious shortcomings are balanced fairly against his equally obvious achievements. B.G. Niebuhr talked about *groben Unwarheiten* [gross cases of untruthfulness] in Bruce’s *Travels*. A scholarly biography of Bruce will probably take note of blatant weaknesses and fine accomplishments, and thereby once again confirm the opinion about Bruce and his *Travels* that was also Carsten Niebuhr’s.

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150. Detailed discussion of this in Thulin (1990).

151. Hopkins (1967); Baack (2013).

152. This is the information on the copy of this chart in the National Library of Firenze, registered as PALAT Cart.naut 8. CF005766170, scale ca. 1:1,700,000, printed on two sheets. A digitised copy of this version has been studied December 2012-April 2013 on <http://teca.bncf.firenze.sbn.it/ImageViewer/servlet/ImageViewer?idr=BNCFO003496016>. A slightly different version of this chart has been seen at the Royal

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Geographical Society, London; It is also stated to have been published on August 14th, 1781, but on four sheets and with the further information in the cartouche that is has been improved with additions by "Colonel James Capper" (as mentioned in the text by G. Annesley). This version was studied in June, 2013. The parts showing the areas of the two contested voyages by Bruce on the Red Sea appear identical in the two versions.